NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.

Congressional Information Service, Inc
Washington, D.C.

97th Congress } JOINT COMMITTEE PRINT
2d Session }

EAST-WEST TRADE: THE PROSPECTS TO 1985

STUDIES

PREPARED FOR THE USE OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

AUGUST 18, 1982

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE
91-916 O WASHINGTON : 1982

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

J842-33

JOINT ECONOMIC COMMITTEE

(Created pursuant to sec. 5(a) of Public Law 304, 79th Cong.)

HOUSE OF REPRESENTATIVES

HENRY S. REUSS, Wisconsin, *Chairman*
RICHARD BOLLING, Missouri
LEE H. HAMILTON, Indiana
GILLIS W. LONG, Louisiana
PARREN J. MITCHELL, Maryland
FREDERICK W. RICHMOND, New York
CLARENCE J. BROWN, Ohio
MARGARET M. HECKLER, Massachusetts
JOHN H. ROUSSELOT, California
CHALMERS P. WYLIE, Ohio

SENATE

ROGER W. JEPSEN, Iowa, *Vice Chairman*
WILLIAM V. ROTH, JR., Delaware
JAMES ABDNOR, South Dakota
STEVEN D. SYMMS, Idaho
PAULA HAWKINS, Florida
MACK MATTINGLY, Georgia
LLOYD BENTSEN, Texas
WILLIAM PROXMIRE, Wisconsin
EDWARD M. KENNEDY, Massachusetts
PAUL S. SARBANES, Maryland

JAMES K. GALBRAITH, *Executive Director*
BRUCE R. BARTLETT, *Deputy Director*

LETTERS OF TRANSMITTAL

AUGUST 2, 1982.

To the Members of the Joint Economic Committee:

I am pleased to send to you a collection of studies on the individual economies of the nonmarket economies entitled "East-West Trade: The Prospects of 1985." The collection includes individual studies on the major participants in East-West trade, the Soviet Union, China, and several of the major industrial countries in Eastern Europe as well as some of the smaller nonmarket economies such as Albania. The focus of all the studies is on the outlook for trade between the East-West in the 1981 to 1985 period.

We are most grateful to Dr. Alan Lenz, Director, Office of Trade and Investments Analysis, International Trade Administration, U.S. Department of Commerce, who conceived and directed the project. The individual country studies were prepared by a number of different specialists in the Office of East-West Policy and Planning, ITA, under the general guidance of Jim Moyer and Lawrence Theriot. We want to extend our thanks to Dr. John Hardt, Senior Specialist in Soviet Economics of the Congressional Research Service for his most helpful assistance. Dr. Kent H. Hughes supervised the preparation of the collection for the committee.

The prospects for East-West trade vary greatly among the nonmarket economies. In some cases, such as China, the prospects for an expansion of East-West and particularly U.S. trade appear bright. In other cases, such as Poland, the future is clouded by uncertainty over the ability of Poland to increase its hard currency exports and the question of how much Western credit will be forthcoming in the future. These studies have been prepared in conjunction with the recently released Joint Economic Committee publication, "East-West Commercial Relations: A Dialog With the Reagan Administration."

All the views expressed herein represent those of the authors and do not necessarily reflect the views of the Joint Economic Committee or any of its members.

Sincerely,

HENRY S. REUSS,
Chairman, Joint Economic Committee.

JULY 30, 1982.

Hon. HENRY S. REUSS,
Chairman, Joint Economic Committee, Congress of the United States.
Washington, D.C.

DEAR MR. CHAIRMAN: I am pleased to send to you a collection of studies on the individual economies of the nonmarket economies entitled "East-West Trade: The Prospects to 1985." The studies run through the full gamut of nonmarket economies starting with Albania and ending with Vietnam. Altogether the collection encompasses studies of 12 different countries. The focus of all the studies is on the outlook for trade between the East and the West in the 1981 to 1985 period.

We are most grateful to Dr. Alan Lenz, Director, Office of Trade and Investments Analysis, International Trade Administration, U.S. Department of Commerce, who conceived and directed the project. The individual country studies were prepared by a number of different specialists in the Office of East-West Policy and Planning, ITA, under the general guidance of Jim Moyer and Lawrence Theriot. We want to extend our thanks to Dr. John Hardt, Senior Specialist in Soviet Economics of the Congressional Research Service for his most helpful assistance. Dr. Kent H. Hughes supervised the preparation of the collection for the committee.

It should be understood that the views expressed in the essays are not necessarily those of the Joint Economic Committee or the individual members.

Sincerely,

JAMES K. GALBRAITH,
Executive Director, Joint Economic Committee.

FEBRUARY 1, 1982.

Hon. HENRY S. REUSS,
Chairman, Joint Economic Committee, Congress of the United States, Washington, D.C.

DEAR MR. CHAIRMAN: I am pleased to provide the enclosed research papers on the foreign trade performance and prospects for each of the Communist countries with the Industrialized West.

These analytical reports contain detailed country assessments which will supplement the highly useful discussion that occurred at the Joint Economic Committee's October 27, 1981, workshop on current issues in East-West trade.

We appreciate the continued interest of the committee in East-West trade and welcome any additional inquiries you may have.

Sincerely,

EUGENE K. LAWSON,
Deputy Assistant Secretary for East-West Trade,
Department of Commerce.

PREFACE

The studies published in this volume assess past and future trade patterns of 12 centrally planned economies with countries of the Industrialized West. The centrally planned economies are the U.S.S.R., Poland, Romania, Hungary, Czechoslovakia, the German Democratic Republic, Bulgaria, China, North Korea, the Socialist Republic of Vietnam, Cuba, and Albania. Industrialized Western countries include: Austria, Belgium-Luxembourg, Canada, Denmark, Federal Republic of Germany, Finland, France, Ireland, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and the United States. The assessments for China, Vietnam, and Cuba include appropriate additional Western trade partner countries.

The projections of trade through 1985 were developed assuming adequate access to international capital to finance anticipated current account deficits. However, Polish and Romanian financial problems have tended to make international banks and Western government export credit agencies more cautious about lending elsewhere in East Europe, thereby making it more difficult for these countries to secure desired levels of trade financing. Therefore, projected levels of trade for some countries in Eastern Europe, and perhaps the U.S.S.R., may prove optimistic, particularly if the Polish and Romanian external payments situations continue to deteriorate. Nevertheless, these assessments can provide useful indications of the levels of potential East-West trade under varying scenarios.

At the time of writing, detailed data used in most of the assessments were available only through 1979–80. Wherever possible, more current data have been incorporated and trends reviewed in light of the additional information.

CONTENTS

Page
Letters of Transmittal ---- III
Preface ---- V

EAST-WEST TRADE: THE PROSPECTS TO 1985

Albania: Performance and Prospects for Trade With the United States and the West ---- 1
Bulgaria: Performance and Prospects in Trade With the United States and the West ---- 22
China: Performance and Prospects for Trade With the United States and the West ---- 51
Czechoslovakia: Performance and Prospects for Trade With the United States and the West ---- 78
Cuba Faces the Economic Realities of the 1980's ---- 104
GDR: Performance and Prospects in Trade With the West ---- 136
Hungary: Performance and Prospects in Trade With the United States and the West ---- 160
North Korea: Performance and Prospects in Trade With the United States and the West ---- 182
Poland: Performance and Prospects in Trade With the United States and the West ---- 203
Romania: Performance and Prospects for Trade With the United States and the West ---- 237
U.S.S.R.: An Assessment of U.S. and Western Trade Potential With the Soviet Union Through 1985 ---- 275
Vietnam: Performance and Prospects for Trade With the United States and the West ---- 318

ALBANIA: PERFORMANCE AND PROSPECTS FOR TRADE WITH THE UNITED STATES AND THE WEST

By Lawrence Kessler

CONTENTS

Page
Summary 1
I. Albanian Objectives and Performance in Trade During the 1970's 2
  A. Trade With the West 2
  B. Trade With the U.S 3
  C. Trade With CMEA 4
II. Albanian Hard Currency Debt at Year End 1979 4
III. Albanian Hard Currency Trade Objectives and Strategy 1981–85 4
IV. Albanian Hard Currency Export Capabilities 1981–85 6
V. Albania's Hard Currency Trade Outlook 1981–85 8
VI. U.S.-Albanian Trade Potential Under Normalized Conditions 9
  A. Constraint 9
  B. Potential Composition of U.S. Exports to Albania Under Normalized Conditions 9
    1. Agricultural Trade 9
    2. Non-Agricultural Trade 9
  C. Potential Composition of U.S. Imports From Albania Under Normalized Conditions 10
  D. U.S.-Albanian Trade Complementarity 10
VII. Policy Implications in U.S. Commercial Relations With Albania 10
VIII. 1981–85 Projections of U.S.-Albanian Trade 11

APPENDIX TABLES

A–1. Albanian Foreign Trade by Major Trading Groups, 1960–79 12
A–2. Albanian Trade With 30 Western Nations, 1970–79 13
A–3. U.S.-Albanian Trade, 1974–79 13
A–5. Albanian Trade With 30 Western Nations and U.S., 1974–79 13
A–6. Composition of Albanian Imports From 30 Western Nations, 1974–79 14
A–7. Leading Albanian Imports From the 30 Western Nations 15
A–8. Origins of Leading Albanian Imports From 30 Western Nations 16
A–9. 29 Western Countries Export Trade Shares to Albania, 1974–79 17
A–10. Composition of Albanian Exports to 29 Western Nations, 1974–79 18
A–11. Leading Albanian Exports to 29 Western Nations 19
A–12. 30 Western Countries Import Trade Shares From Albania, 1974–79 20
A–13. Projected 1985 Albanian Trade With 30 Western Nations 21
A–14. Projected 1985 U.S.-Albanian Trade 21

SUMMARY

The profile of Albanian trade with the West in the 1980s should not differ much from that of recent years. Despite continued industrial expansion, Tirana will continue to require imports of iron and steel manufactures, machinery, and construction equipment. At times the Hoxha regime may also find it necessary to purchase raw materials and food grains to supplement domestic shortfalls. According to our

projections, by 1985 Industrialized Western (I.W.) nations' exports to Albania could range from a low of $175 million to a high of $255 million, compared with $125 million in 1979. Increased purchases of Western imports, however, will be constrained by Albania's limited hard currency export capabilities. Exports of primary products to the West will remain relatively high. Industrialized Western imports of Albanian products could increase from $155 million in 1979 to between $170 and $275 million per year by 1985.

Albania will continue to try to expand trade with the West, as well as with CMEA and the developing countries. For political and economic reasons, the regime will walk a narrow tightrope, attempting to equalize its trade between the East and West. Hoxha wants to maintain Albanian independence from perceived "foreign imperialist powers". But although Albania has shown a marked preference for technologically superior Western equipment, it needs CMEA markets to absorb exports of Albanian intermediate and finished goods which are not of high enough quality for sale to the West.

The currently miniscule, trade turnover with the U.S. should continue to expand in this period as long as Albania expands its raw material exports and relations with the U.S. do not deteriorate. According to our projections by 1985 U.S. exports to Albania could range from a low of $10 million to a high of $18 million per year, as compared with $10 million in 1979. Over this period, U.S. imports of Albanian products could increase from $11 million in 1979 to between $9 and $19 million by 1985. There is not a close complementarity between the U.S. and Albanian economies; however, Albania does offer an additional supply source of chrome for the U.S.

I. ALBANIAN OBJECTIVES AND PERFORMANCE IN TRADE DURING THE 1970's

A. TRADE WITH THE WEST

The termination of Chinese trade and economic assistance in 1978 left Albania without a benefactor for the first time since World War II.[1] The immediate result of this withdrawal was the interruption of Albanian industrial development and near complete isolation of the Hoxha regime from the major world powers. Albania's reaction was twofold. First, the regime encouraged greater reliance on domestic reserves, reaffirming its governing principle of a "pure Stalinist ideology." Second, the regime began to slowly expand economic and cultural relations with specific Western nations to help satisfy the economic requirements left when Beijing broke ties. Albania's effort to expand trade with the West was governed by the following commitments:

Diversification of trade among several Western nations to lessen economic dependence upon any one trading partner.

Elimination or substantial reduction of hard currency trade deficits; an especially difficult goal in light of the regime's refusal to utilize Western credits to finance trade expansion.

Identification of suitable export markets to replace trade with China.

---

[1] China had accounted for over 50 percent of Albanian exports until the mid 1970s. Sino-Albanian trade fell drastically in the late 1970s.

Importation of the necessary technological infrastructure to expand raw material exports and complete unfinished projects needed for domestic industrialization.

To a great extent the Hoxha regime met these goals. Trade turnover with the West rose substantially from under $50 million in 1970 to $130 million in 1974 to over $275 million in 1979. As a percentage of total Albanian trade, trade with the West rose from 20 percent in 1974 to over 35 percent in 1979. Trade diversification was also achieved. In 1974, Italy and Yugoslavia were by far Albania's largest Western trading partners, accounting for over 50 percent of total trade with the West. By 1979, Albania had established trading relations with over 70 Western nations, approximately three times the number in 1970. Yugoslavia and Italy continued to be Albania's largest trading partners in 1979, comprising 40 percent of its trade with the West, with trade with the FRG, Greece, Sweden, and the U.S. accounting for some 37 percent of total Western trade. (See Table 1.) Also in 1979, Tirana for the first time ran a substantial ($31 million) surplus in its trade with the West. (See table A–2.)

The Hoxha regime continues to prohibit utilization of credits from "capitalist bourgeois and revisionist monopolies and states." Albania has not taken any part in long or medium term loan syndications and has relied upon its meager hard currency reserves and infrequent short term borrowings to finance trade when funds from exports were insufficient.[2] In an effort to save hard currency, Albania has attempted to expand barter and counter trade transactions with the West. However, Western trade partners have complained about the quality of Albanian products and thus far have been very cautious in accepting these types of arrangements.

B. TRADE WITH THE UNITED STATES

This turn to the West by the Hoxha regime has been orchestrated in a cautious and selective manner. Tirana has been particularly wary of expanding relations with the U.S., which the regime has branded as the "ultimate imperialist capitalist superpower". Thus, several U.S. offers throughout the 1970's to resume diplomatic relations and thereby solidify trade relations were officially turned down.[3] Nevertheless trade between the two nations has been growing (see table A–3). Pragmatic Albanian foreign trade ministers realized the benefits of importing U.S. coal (to offset several poor years of domestic coal output) in return for shipments of Albanian chrome. In the early 1970's the U.S. imported over 90 percent of the chrome it consumed, primarily from South Africa and the USSR, and it was anxious to diversify its source of supply. This was the basis for the U.S.-Albanian trade relationship, which grew from under $1 million in 1974 to nearly $21 million by

---

[2] Hard currency holdings in the West are small, under $75 million in June 1981. Short term lending by Italy and Western banks has been reported on occasion in recent years without confirmation. It should also be noted that Albanian gold reserves confiscated by the British from the Germans after World War II, valued at over $15 million, are still held by the U.K. awaiting resolution of a shipping incident in Corfu Channel in 1946.

[3] U.S. Deputy Secretary of State Kenneth Rush on April 4, 1973 summed up U.S. policy toward Albania by stating that "if and when Albania wishes to resume diplomatic relations with the U.S., it will find us prepared to respond." This offer was reiterated in the Ford and Carter administrations.

1979. U.S. companies operating through third countries facilitated the trade links between the two nations.

C. TRADE WITH CMEA

Albanian trade with CMEA grew from $112 million in 1972 to almost $170 million in 1978, and the regime has recently signed new trade agreements with several CMEA nations calling for further increases in trade.

Albania has been selective in choosing communist country trading partners. Since the split with the Soviet Union in 1960, Albania has not traded with Moscow. It has been equally hesitant of expanding commercial ties with Bulgaria, which it calls "the right arm of the Soviet revisionists". The Hoxha regime also has been quick to condemn Romania for maintaining warm relations with the new Chinese leadership.

Trade with CMEA has two distinct advantages for Albania over trade with the West. First, most transactions are conducted on a barter basis. Second, Albania reportedly has accepted short term loans from several CMEA nations to help finance purchase of complete plants. Since the break with China, trade with CMEA has expanded at approximately the same rate as trade with the West and the Hoxha regime indicates this pattern will continue in the future.

II. ALBANIAN HARD CURRENCY DEBT AT YEAR END 1979

Albania has not taken part in long or medium term loan syndications. Thus at year end 1979, Albania had no debt obligations to Western governments or banks.

III. ALBANIAN HARD CURRENCY TRADE OBJECTIVES AND STRATEGY 1981–85

Import needs.—The major proportion of Albanian imports from the West in the 1970's fell under four headings: basic industrial goods, machinery and transport equipment, mineral fuels, and chemicals (see Table A–6). The largest category consistently has been industrial goods. These imports (over $40 million in 1979) have enabled Albania in part to complete or make up for shortfalls created when industrial facilities were left incomplete by the Chinese departure in 1978. Machinery and transport equipment ($19.7 million in 1979) has been the next largest category, followed by mineral fuels ($19.2 million), and chemicals ($15.6 million).

Except for 1976 when imports from the West fell sharply, Albania has steadily expanded its purchase of Western goods. The drop in 1976 was directly attributable to a Party Purge initiated in late 1975. (Throughout his regime Hoxha has maintained party loyalty and allegience by periodic Party Purges.) The 1975–76 purge resulted in the demotion or expulsion from the Party of nearly 50 percent of the top ranking Party officials. This action had a severe destabilizing effect on the economy, which did not get back on track until mid-1977.

The next four sections provide a brief overview of each import category with growth prospects through 1985.

Industrial goods.—Imports of industrial goods from the West have ranged from $31–43 million annually since 1974. These goods have been essential in Albania's efforts to industrialize its rural-based economy. Over 30 percent of Albanian imports from the West have been in this category, clearly reflecting the Hoxha regime's priorities. Iron and steel has been the largest import commodity in this group, followed by textile yarns ($6.7 million), non-metallic minerals, including refractory brick ($4.1 million), and non-metallic manufactures ($4 million).

In the next five years, the Hoxha regime intends to expand output of iron ore and build new steel foundries. However, domestic demand for iron and steel will continue to exceed production if the country's high economic growth targets and ambitious modernization plans are to be fulfilled.[4] Much of the imported mining equipment and technology in the 1980s will be required to expand output of Albania's vital chrome industry. This, will exacerbate Albania's iron and steel shortages and continue reliance on imports of industrial goods from the West.

Machinery and transport equipment.—Imports of machinery and transport equipment, comprised almost equally of electrical and non-electrical machinery, totalled $19.7 million in 1979. The single most important import segment in 1979 was telecommunication equipment, totalling $4 million. Radio Tirana, built initially with Chinese assistance, is one of the largest broadcasting stations in the world with over 560 programming hours per week, third in Europe behind Radio Moscow and the BBC. Western telecommunication equipment has enabled Tirana to spread its ideological message worldwide. Non-electric machinery, including excavating and levelling machines, valves, gas pumps, and insulated wire, were the next largest imports ($9 million in 1979). Non-electrical machinery has played a key role in Albania's efforts to expand excavation for mineral ores. Further growth in these imports will be necessary if Albania is to complete industrial facilities left unfinished by the Chinese departure and expand exports of chrome, petroleum, and other primary products.

Albania is banking heavily upon expansion of its domestic mineral resources to help provide sufficient hard currency to permit high economic growth rates through industrialization. The Hoxha degime indicated that it will increasingly turn to the West for those products that it judges are technologically superior to CMEA goods. Thus, the outlook for Western exports of machinery and parts necessary for mineral excavation and development appears bright.

Minerals fuels.—Imports of mineral fuels from the West rose steadily in the 1974–79 period, from $.3 million to $19.2 million. Two goods comprise this import category: coal and petroleum by-products. Coal did not become an important Albanian import until 1977. By 1979 it became Albania's second largest import at $16.3 million. Although Albania possesses sizeable coal reserves, many of them are located in deep inaccessible deposits. Thus the Hoxha regime has decided to import coal to cover planned domestic production shortfalls. Albania also has been forced to import petroleum products ($2.9 million in 1979) because refining facilities have not come on stream as quickly as planned. These imports are likely to continue well into the 1980s.

---

[4] A discussion of the domestic economy, including developments in the agricultural, manufacturing, and industrial sectors would be most useful for a full analysis of Albania import needs. However, the Hoxha regime publishes little reliable information on domestic economic matters. Data that are released usually list increases in economic activity in percentage terms over some base period. Data for base years are not released.

Chemicals.—Imports of chemicals from the West followed the general patterns of imports, rising in the 1974–79 period from $10.3 to $15.6 million. Albania's effort to improve agricultural productivity has resulted in large purchases of Western pesticides—some $4.4 million in 1979. Other chemical imports include dyes, polymers, and plastics.

In the short run Albania will continue to import these chemical products. However, the chemical industry in Albania has been expanding rapidly in recent years. As more plants come on stream in the 1980's, (producing plastics, agricultural fertilizers, and dyes) this requirement should diminish.

Other import needs.—In the next five years the Hoxha regime intends to utilize its unique geological formations to expand exports of electricity to Western Europe and Yugoslavia. To accomplish this task Albania plans to purchase 2 complete hydroelectric power plants from the West. Several nations are competing to supply the necessary technology and expertise.

Currently, Albania is self-sufficient in crude oil. Production comes from on-shore facilities utilizing largely obsolete Romanian and Chinese equipment in a highly labor intensive operation. Studies by the South African Mining Bureau indicate Albania could possess substantial offshore (as well as onshore) reserves. The regime has indicated that it would like to purchase equipment from the West to further develop this industry.

Summarizing the above, we expect a continued expansion in Albanian imports from the West in 1981–85, with an average yearly growth rate approximating that of the 1974–79 period (10 percent per year).

IV. ALBANIAN HARD CURRENCY EXPORT CAPABILITIES 1981–85

Examination of trade data for the 1974–79 period shows large annual fluctuations in export earnings. This irregularity can be attributed to two factors. First, the Party Purge by Hoxha in 1975–76 was directed at the foreign trade ministries. Most ministers were fired or demoted because Albania had been incurring persistent hard currency deficits in its trade with the West. Second, China had been a major market for Albanian products and made important contributions to the development of Albania's export industries. When China withdrew its workers and curtailed trade with the Hoxha regime, Albania could not expand output of marketable exports to the West or quickly find Western markets for the low quality products formerly sent to China.

The major portion of Albanian exports to the West in the 1970's fell under three headings: crude materials, mineral fuels, and miscellaneous manufactured goods. These three categories accounted for 80 percent of total ($154.3 million) exports to the West in 1979 (see Table A–10). Exports of crude materials have been the largest export category since 1975. These exports (over $75 million in 1979) consisted almost entirely of chrome and crude vegetable materials. Mineral fuels ($33.7 million in 1979) has been the next largest category since 1975, followed by miscellaneous manufactured goods ($13.7 million in 1979).

Crude materials.—Exports of crude materials to the West—always an important component in Albania's foreign trade—provided Albania with almost half its hard currency earnings in 1979. Chrome was by far Albania's largest export, earning almost $68 million. Crude vegetable materials, primarily seeds, were the only other major export in this category earning over $5 million.

Albania is the world's third largest producer (1.5 million short tons in 1979) and second largest exporter (over 800,000 short tons in 1979) of chrome. Currently selling at over $50 per ton, chrome provided Albania with 44 percent of total 1979 hard currency export earnings. The four principal Western markets for Albanian chrome are Sweden, West Germany, Yugoslavia and the U.S., respectively. These countries import over 90 percent of the chrome they consume and have increased imports from Albania to help diversify their sources of supply.

Albanian output of chrome has increased six-fold since 1960, primarily from existing mines. The regime will place great emphasis on increasing exports of chrome in the 1980's. More heavy machinery will be imported from the West to be used to excavate deeper into existing mines. Albania also intends to step up domestic investment to help develop new facilities to increase output by 700,000 tons annually—nearly doubling the 1979 total—by the end of the 1981–85 period. Recent studies by the South African Mining Bureau substantially upgraded Albanian reserves to over 20 million metric tons, at least a 15 year supply.

It is theoretically possible for Albania to continue to expand chrome output. However, the ore will become increasingly more costly to produce. Considering South Africa's ability to produce equally high quality ore at cheaper prices, and given South African and Soviet ability to expand output, the world price of chrome should remain relatively stable throughout the next five years. If this scenario holds, Albania will be able to earn more from chrome only through increased export quantities.

Albania's sixth largest export—crude vegetable materials—should increase slightly from its 1979 level of $5.4 million in the next five years as Albania endeavors to make the agricultural sector of its economy more capital intensive.

Mineral fuels.—Earnings from exports of mineral fuels to the West fluctuated widely in the 1974–79 period. In 1979, higher prices and increased exports made this Albania's second most important export category, with earnings reaching nearly $34 million. Petroleum and its by-products were Albania's second largest export commodity in 1979, earning almost $29 million. Electric energy, Albania's seventh largest export, earned over $5 million.

Albania has the potential to increase exports of energy products. The country produced around 64,000 b/d of oil in 1979 and found ready markets for these exports in nearby Italy, Greece, Turkey, and Yugoslavia. Geological studies by the South African Mining Bureau indicate that Albania could possess substantial offshore and onshore reserves. Unfortunately, the Hoxha regime does not possess the necessary equipment, technology, and know-how to exploit these potential reserves. Tirana will have to import this technology from the West—an onerous task for a nation whose hard currency imports are directly constrained by hard currency export earnings.

In the 1981–85 period Albania will be hard pressed to replace obsolete oil rig equipment. Petroleum production will remain subject to breakdown of equipment and shortage of spare parts. Thus, we expect oil production to fluctuate perhaps as widely as it did in the 1974–79 period. Exports will vary according to output, and will probably remain confined to nearby countries.

Prospects for exports of electrical energy to the West seem brighter in the 1981–85 period. Currently Albania produces over 2 billion kilowatt hours (Kwh) of hydroelectric power annually. Given its rugged terrain with steep narrow rivers and large lakes, the country is well suited to expanding hydroelectric output. In 1980–81, two more hydro plants are scheduled to come on-stream, bringing total electric output to over 3 billion Kwh. The Hoxha regime intends to obtain two more hydropower facilities by 1985. Given Albania's limited consumption requirements, the bulk of this energy could be exported. Albania has been discussing this prospect with Italy, Greece, Yugoslavia, Austria, and Switzerland.

Miscellaneous manufactured goods.—Exports of miscellaneous manufactured goods grew steadily in the 1974–79 period, amounting to $13.7 million in 1979. Albania's third largest export commodity—clothing—was by far the most important export earner in this category at $11 million in 1979. Albania has endeavored to assure continued expansion of these exports by increasing production of cotton and textiles.

Other exports.—Exports of other goods—especially textiles, fruits, and vegetables, tobacco, nickel, and copper—should continue to grow by 5 percent annually. Albania does not have the capacity to substantially increase exports of these goods.

Summarizing the above, we expect that the Hoxha regime will place great emphasis on increasing exports to the West in 1981–85. Exports of primary products (i.e., chrome and petroleum) will remain high. Thus, development and expansion of Albania's domestic resources base will be vital if the country is to generate sufficient hard currency revenues.

The terms of trade with the West should not improve substantially in the 1980's. Only petroleum prices should rise in real terms and Albania's capacity to expand these exports is quite questionable. Global inflation will likely add to the cost of imports of Western technology and equipment and thus probably negate most potential gains by increased exports of chrome and miscellaneous manufactured goods.

V. ALBANIA'S HARD CURRENCY TRADE OUTLOOK 1981–85

Albania's trade in the next five years with the Industrialized West is heavily dependent upon three factors.

> Albania will need substantial imports of expensive Western machinery, iron and steel, and technology. If the Hoxha regime remains committed to refusing to borrow from the West to finance import needs, it must expand export earnings.
>
> Albania has limited overall trade potential. Should the level of trade conducted with Eastern Europe rise, trade with the West would have to be curtailed.

Economic growth and industrialization can only be achieved in periods of relative party stability. Purges by Hoxha can have destabilizing effects on Albania's economy which could disrupt or curtail Albania's trade potential for several years.

Two scenarios have been constructed in order to project Albania trade with the West (see Table A-13).

Low-Range Estimate. This assumes a less optimistic scenario for Albanian-Industrialized West trade. Under these conditions, the Hoxha regime remains adamant in its refusal to utilize Western credits to finance Western imports. Export earnings for a variety of reasons become sluggish, rising by only 2 percent annually from 1979. Lack of hard currency forces the regime to curtail necessary imports from the West, which would rise by at most 5 percent annually. Tirana would begin to increase trade with Eastern Europe in order to save hard currency.

High-Range estimate. This scenario assumes a continued favorable trade climate between Albania and the Industrialized West. Imports would rise by 12–15 percent annually from 1979 levels. Hard currency exports would continue to rise by 12 percent annually—enough to accumulate a small hard currency surplus by 1935. A slowdown in Albania-Eastern European trade, increased raw materials outputs, and favorable price terms for export commodities would account for increased export earnings.

VI. U.S.-ALBANIAN TRADE POTENTIAL UNDER NORMALIZED CONDITIONS

A. CONSTRAINT

As previously discussed, the basic constraint preventing "normalized" U.S.-Albanian trade relations has been Hoxha's vehement denunciations of U.S. policy and his refusal to resume diplomatic relations. The U.S. has on several occasions, offered to meet with Albania to discuss this question, but has been turned down each time. If (and when) diplomatic relations are restored (an unlikely prospect during Hoxha's rule), Albanian exports to the U.S. would not receive MFN until a bilateral trade agreement conferring such status was signed and ratified by Congress.

B. POTENTIAL COMPOSITION OF U.S. EXPORTS TO ALBANIA UNDER NORMALIZED CONDITIONS

1. Agricultural Trade—Since 1976, Albania has been a net exporter of foodstuffs. The U.S. has never exported any agricultural produce to Albania. Considering Albania's commitment to land reclamation, and more widespread utilization of chemical and heavy machinery to increase agricultural output per hectare, it seems unlikely that the U.S. will have the opportunity to export agricultural products to Albania.

2. Non-Agricultural Trade—The U.S. had three exports to Albania in 1979—coal, non-electric machinery and animal hides. Coal comprised 94 percent of the total—some $9.5 million. Currently, the regime is diverting machinery used in coal mines to chrome mining facilities. If this trend continues, Albania will need to continue importing coal.

As long as the U.S. imports Albanian chrome, Tirana will probably continue purchases from U.S. sources. Expansion of these imports will be limited by the small size of Albania's economy, however, Albania is also reportedly interested in importing offshore oil drilling equipment and deep mining technology from the U.S. Prospects for U.S. exports of such technology would be abetted if relations were resumed.

C. POTENTIAL COMPOSITION OF U.S. IMPORTS FROM ALBANIA UNDER NORMALIZED CONDITIONS

Albania had two important exports to the U.S. in 1979, chrome and crude plant products. Chrome comprised over 60 percent of the total—earning some $6.5 million. Crude vegetable products, the only other major export, earned $2.3 million. Since Albania's two largest exports to the U.S. are crude raw materials, subject to minimal (if any) additional U.S. tariff, MFN status would have no sizable impact on U.S.-Albanian trade. U.S. industries would not be adversely effected by the small level of Albanian exports to the U.S.

D. U.S.-ALBANIAN TRADE COMPLEMENTARITY

U.S.-Albanian trade has grown substantially in the last decade. Historically this trade has been limited to just a few commodities. As noted, U.S. imports have consisted almost entirely of chrome and crude vegetable materials, while U.S. exports have consisted primarily of assorted manufactures and coal. Trade between the two nations since 1974 has resulted in a slight surplus for Albania ($0.8 million in 1979).

The basis for U.S.-Albanian trade complementarity can be found in the coal-chrome trade. The U.S. purchases good quality, low priced chrome from Albania and diversifies its sources of supply. Albania purchases high quality American coal at much lower cost (albeit in hard currency) than it would incur if Tirana exploited its own reserves. Over 60 percent of Albania coal purchases from the West came from the U.S. in 1979.

Over 75 percent of total U.S.-Albanian trade in 1979 was in chrome and coal. We expect this percentage to fall slightly in the 1981–85 period, as the U.S. increases exports of machinery and equipment to be used in Albanian mining and oil producing facilities. In general, however, U.S.-Albanian trade expansion will remain hampered by Albania's inability to expand raw material exports and its rigid insistence on eliminating hard currency trade deficits.

VII. POLICY IMPLICATIONS IN U.S. COMMERCIAL RELATIONS WITH ALBANIA

The Hoxha regime has rebuked all U.S. initiatives for official political and commercial relations and cultural exchanges. Tirana is wary of expanding ties with the U.S. As long as Hoxha retains political control, it appears unlikely that the U.S. can successfully improve relations.

VIII. 1981–85 PROJECTIONS OF U.S.-ALBANIA TRADE

Albania's trade with the U.S. in the next five years will be heavily dependent upon three factors:

Albania's capacity to expand chrome exports.

The state of relations with the U.S.

Albania's emphasis on developing deeper, more inaccessible mines and offshore oil reserves.

Two scenarios have been constructed in order to project U.S.-Albania trade by 1985 (see Table A–15).

Low-Range Estimate. This assumes a less optimistic scenario for U.S.-Albanian trade. Under these conditions, the Hoxha regime is unable to expand chrome exports to the U.S. This gap in hard currency earnings may force Tirana to cut back on imports. Political relations remain strained and could even worsen in the period. A complete break in trade with the U.S. is always possible considering Albania's fluctuating foreign policy. Trade turnover could remain stagnant at 1979 levels ($21 million) and actually fall if inflation is taken into account.

High-Range Estimate. This scenario assumes a continued favorable trade climate between the U.S. and Albania. Resumption of diplomatic relations, though highly desirable, would not necessarily be a prerequisite for this improving economic trend. Exports of raw materials to the U.S. would rise and Albania could begin to export food and manufactured goods. Increased hard currency earnings would permit the regime to purchase sought-after high technology and equipment. If diplomatic relations are restored, greater prospects for U.S. exports and imports would exist through trade fairs and other trade development activities. Trade turnover could expand from $21 million in 1979 to nearly $40 million by 1985.

APPENDIX

TABLE A-1.—ALBANIAN FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960–79

[Dollar amounts in millions of U.S. dollars]

	1960	Percent of total	1970	Percent of total	1974	Percent of total	1975	Percent of total	1978	Percent of total	1979	Percent of total
Albanian imports	81.0	------------	143	------------	299.7	------------	233.0	------------	(1)	------------	(2)	------------
Of which:												
U.S.S.R.	46	56.8	0	------------	0	------------	0	------------	0		0	------------
East Europe	24	29.6	40	28.0	69.1	23.1	72.9	31.3	(2)	------------	(2)	------------
China	7	8.6	88	61.5	147.0	49.0	72.0	30.9	(2)	------------	(2)	------------
Developed countries [3]	4	4.9	12	8.4	69.8	23.3	75.3	32.3	82.2	------------	119.2	------------
Less developed countries [4]	(5)	------------	3	2.1	13.8	4.6	12.8	5.5	4.7	------------	4.1	------------
Albanian exports	49	------------	80	------------	219.7	------------	261.9	------------	(2)	------------	(1)	------------
Of which:												
U.S.S.R.	24	49.0	0	------------	0	0	0	------------	0	------------	0	------------
East Europe	21	42.9	40	50.0	89.6	40.8	92.4	35.3	(2)	------------	(2)	------------
China [1]	2	2.2	27	33.8	72.0	32.8	96.0	36.7	(2)	------------	(2)	------------
Developed countries [3]	2	2.2	10	12.5	52.5	23.9	67.6	25.8	56.7	------------	147.0	------------
Less developed countries [4]	(5)	------------	3	3.4	5.6	2.5	5.9	2.3	7.9	------------	7.3	------------

---

[1] Data not available in 1978, 1979.
[2] Not available.
[3] Includes Yugoslavia.
[4] Data for less developed countries are incomplete.
[5] Negligible.

Source: U.S. Government.

TABLE A-2.—ALBANIAN TRADE WITH 30 WESTERN NATIONS, 1979–79[1]

[In millions of dollars]

	1970	1974	1975	1976	1977	1978	1979	Average annual growth rate 1974–79
Albanian imports	18.6	73.1	79.2	52.7	75.4	86.9	123.3	11.0
Albanian exports	18.8	58.1	72.4	54.2	78.0	64.6	154.3	21.6
Trade turnover	37.4	131.2	151.6	106.9	153.4	151.5	277.6	16.2
Balance	–.2	–15.0	–6.8	+1.5	+2.6	–22.3	+31.0	

[1] Includes developed and less developed countries, and Yugoslavia.

Source: U.S. Government.

TABLE A-3.—UNITED STATES–ALBANIAN TRADE, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
U.S. exports	0.5	0.5	0.4	0.3	4.5	10.1
Of which:						
Agricultural	0	0	0	0	0	0
Manufactured[1]	0	0	0	0	.2	.5
Other	.5	.5	.4	.3	4.3	9.6
U.S. imports	.5	.5	.8	3.4	3.9	10.8
Of which:						
Agricultural	0	0	.2	0	0	.1
Manufactured[1]	.1	0	0	0	0	0
Other	.4	.5	.6	3.4	3.9	10.7
Trade turnover	1.0	1.0	1.2	3.7	8.4	20.9
U.S. balance			–.4	–3.1	.6	–.7

[1] SITC 5–8.

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-5.—ALBANIAN TRADE WITH 30 WESTERN NATIONS AND UNITED STATES, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Imports from West	73.1	79.2	52.7	75.4	86.9	123.3
United States	.5	.7	1.1	2.2	4.5	10.1
U.S. share	.7	.9	2.1	2.9	5.2	8.2
European Community	36.3	41.5	29.6	43.2	40.7	54.2
European Community share	49.7	42.5	56.2	57.3	46.8	44.0
Of which:						
Foodstuffs[1]	14.8	17.5	3.5	10.7	7.7	10.2
United States	0	0	0	0	0	0
U.S. share						
European Community	2.5	4.3	2.9	6.4	3.5	2.4
European Community share	16.9	24.6	82.9	59.8	45.5	23.5
Manufactured[2]	52.8	57.6	41.2	49.2	57.0	83.5
United States	.1	.1	.7	.1	.2	.4
U.S. share	.2	.2	1.7	.2	.4	.5
European Community	30.4	34.4	22.0	27.8	28.9	39.9
European Community share	57.6	59.7	53.4	56.5	50.7	47.8
High technology	1.7	4.0	2.7	2.0	3.8	9.6
United States	.1	.1	.3	.1	.1	.3
U.S. share	5.9	2.5	11.1	5.0	2.6	3.1
European Community	1.5	2.5	1.3	1.3	2.9	7.1
European Community share	88.2	62.5	48.1	65.0	76.3	74.0
Exports to West	58.1	72.4	54.2	78.0	64.6	154.3
United States	.5	2.8	2.7	3.4	3.9	10.8
U.S. share	.8	3.9	5.0	4.4	6.0	7.0
European Community	27.7	27.4	26.3	32.5	29.7	65.2
European Community share	47.7	37.9	48.5	41.7	46.0	42.3
Trade turnover with West	131.2	151.6	106.9	153.4	151.5	277.6
Balance	–15.0	–6.8	+1.5	+2.6	–22.3	+31.0
Balance with United States	0	–2.1	–1.6	+1.2	–.6	–.7
Balance with European Community	–8.6	–14.1	–3.3	–10.7	–11.0	–11.0

[1] SITC 0,1,4.
[2] SITC 5–8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF ALBANIAN IMPORTS FROM 30 WESTERN NATIONS, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1979 percent of total	Averag annua growth rate 1974–79
Imports from West	73.1	79.2	52.7	75.4	86.9	123.3		11.0
Foodstuffs (STIC 0, 1, 4)	14.8	17.5	3.5	10.7	7.7	10.2	8.3	−7.7
Fixed vegetable oils, fats	2.6	1.5	1.5	3.7	2.3	5.1		
Cereals	6.9	10.7	(1)	1.7	1.4			
Crude Materials (STIC 2)	5.2	3.3	4.6	6.7	11.2	10.4	8.4	14.9
Textile fibers	3.1	1.3	2.6	3.7	8.7	6.4		
Mineral fuels (STIC 3)	.3	.7	1.5	8.7	11.0	19.2	15.6	229.2
Coal, coke, briquettes	(1)	(1)	(1)	8.0	10.2	16.3		
Chemicals (STIC 5)	10.3	8.9	9.7	11.4	14.3	15.6	12.7	8.7
Chemicals NES	.9	1.0	1.2	1.7	3.0	4.4		
Chemical elements, compounds	1.8	2.1	1.9	3.8	4.1	3.4		
Dyes tanning	1.9	2.0	1.9	2.2	3.2	2.7		
Basic industrial goods (STIC 6)	30.9	30.5	21.1	27.5	27.0	43.1	35.0	6.9
Iron and steel	15.5	15.6	9.2	14.6	11.0	21.1		
Textile yarn	6.9	7.6	5.0	5.1	6.3	6.7		
Nonmetal minerals	.5	.9	.5	1.0	2.0	4.1		
Metal manufacturers	2.2	2.5	1.9	1.3	1.6	4.0		
Paper	3.3	1.8	1.6	1.3	2.4	3.8		
Machinery and transport equipment (STIC 7)	9.4	15.4	5.6	7.4	13.1	19.7	16.0	15.9
Electric machinery	3.2	2.9	2.4	3.2	3.3	9.3		
Machinery, nonelectric	4.0	7.3	2.2	3.3	3.7	9.3		
Miscellaneous manufactured goods (STIC 8)	2.3	2.8	4.8	2.9	2.5	5.0	4.1	16.8
Watches, clocks	.7	.8	.5	.7	1.0	2.5		
Other	(1)	.1	1.9	.1	.1	.1	.1	

[1] Negligible.

Source: U.S. Government.

TABLE A-7.—LEADING ALBANIAN IMPORTS FROM 30 WESTERN NATIONS

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
67	Coal, coke, briquettes	1	$21,064	17.1		$11,031	12.7		$14,558	19.3	
32	Iron and steel	2	16,260	13.2		10,208	11.8		8,011	10.6	
72	Machinery, nonelectric	3	9,319	7.6		3,318	3.8		3,201	4.2	
71	Electrical machinery	4	9,265	7.5		3,684	4.2		3,329	4.4	
65	Textile yarn, fabric, etc	5	6,706	5.4	50.8	6,320	7.3	39.8	5,139	6.8	45.4
26	Paper, paperboard and manufactures	6	6,392	5.2		8,693	10.0		3,690	4.9	
42	Metal manufactures, n.e.s	7	5,076	4.1		2,287	2.6		3,722	4.9	
59	Petroleum and byproducts	8	4,361	3.5		3,041	3.5		1,734	2.3	
66	Dyes, tanning, color products	9	4,112	3.3		1,953	2.2		1,044	1.4	
69	Instruments, watches, clocks	10	4,035	3.3	70.2	1,585	1.0	60.0	1,337	1.8	60.7
	5-DIGIT SITC AGGREGATES										
3214	Coal	1	15,187	12.3		10,208	11.8		8,011	10.6	
2631	Iron, steel tube, seamless, n.e.s	2	5,565	4.5		8,061	9.3		3,232	4.3	
6702	Excavating, levelling, etc., machinery	3	5,498	4.5		3,134	3.6		1,914	2.5	
6703	Lubricating preparations, 70-percent petroleum products	4	5,161	4.2		1,672	1.9		1,285	1.7	
4216	Other telecommunication equipment	5	5,058	4.1	29.6	1,503	1.7	28.3	3,406	4.5	23.7
66232	Synthetic org dye, nat indigo	6	3,782	2.7		1,664	1.9		645	.9	
5992	Parts to insert in tools	7	2,008	2.1		1,636	1.9		1,237	1.6	
71842	Electrical carbons	8	2,317	1.9		434	.5		447	.6	
33251	Other chemical products, preparations, n.e.s	9	2,132	1.7		506	.6		254	.3	
7241	Products of polymarizing, etc	10	1,883	1.5	39.5	1,522	1.8	34.9	1,565	2.1	29.2

TABLE A-8.—ORIGINS OF LEADING ALBANIAN IMPORTS FROM 30 WESTERN NATIONS

[Dollar amounts in millions of U.S. dollars]

1979 Item rank	SITC	Description: Origin	1979			1977		
			Origin rank	Value	Item percent of total	Origin rank	Value	Origin percent of total
1	67	Iron and steel		$21.1	17.1		$14.6	19.3
		Greece	1	5.0	23.7	1	5.2	35.6
		Yugoslavia	2	4.8	22.7	2	4.9	33.6
		Japan	3	3.4	16.1	3	2.6	17.8
		United States						
		European Community		6.0	28.4		7.5	51.4
2	32	Coal, coke, briquettes		16.3	13.2		8.0	10.6
		United States	1	9.5	58.3	1	6.2	77.5
		Federal Republic of Germany	2	5.7	35.0	2	1.8	22.5
		France	3	1.1	6.7			
		European Community		6.8	41.7		6.2	77.5
3	72	Electric machinery		9.3	7.6		3.2	4.2
		Yugoslavia	1	2.8	30.2	1	1.8	56.1
		France	2	2.4	25.3	2	.6	17.7
		Federal Republic of Germany	3	1.8	19.4	3	.3	10.3
		United States	7	.1	1.6	11	(1)	(1)
		European Community		5.7	61.3		.9	28.1
4	71	Machinery, nonelectric		9.3	7.5		3.3	4.4
		Italy	1	4.5	48.9	1	1.0	28.8
		Federal Republic of Germany	2	1.5	16.0	2	.7	22.1
		Yugoslavia	3	1.4	15.5	3	.6	19.4
		United States	5	.3	3.2			
		European Community		6.5	69.9		1.7	51.5
5	65	Textile yarn, fabric, etc		6.7	5.4		5.1	6.8
		Netherlands	1	3.	48.6	1	2.3	45.2
		Yugoslavia	2	2.0	30.0	2	.9	18.0
		Italy	3	.5	7.6	3	.8	16.0
		United States						
		European Community		4.2	14.9		4.1	80.4

[1] Negligible.

Source: U.N. trade data magnetic tape.

TABLE A-9.—29 WESTERN COUNTRIES EXPORT TRADE SHARES TO ALBANIA, 1974–79

[Dollar amounts in thousands of dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)
IW, total	$73, 440	100.0	$79, 153	100.0	$52, 710	100.0	$75, 301	100.00	$86, 861	100.0	$123, 117	100.0	$490, 562	100.0
Belgium-Luxembourg	360	.5	1, 119	1.4	741	1.4	830	1.1	1. 128	1.3	649	.5	4, 827	1.0
Denmark	912	1.2	724	.9	975	1.5	377	.1	339	.4	294	.2	3, 391	.7
Federal Republic of Germany	13, 221	18.1	12, 960	16.4	5, 581	10.6	17, 416	23.1	14, 924	17.1	17, 876	14.5	81, 878	16.7
France	2, 259	3.1	3, 819	4.8	3, 799	7.2	4, 241	5.6	3, 295	3.8	7, 680	6.2	25, 093	5.1
Ireland	6	0	6	0	7	0	1	0	2	0	0	0	22	0
Italy	13, 958	19.1	16, 551	20.9	13, 423	25.5	14, 332	19.0	12, 865	14.8	20, 620	16.7	91, 749	18.7
Netherlands	3, 602	4.9	4, 912	6.2	5, 059	9.6	5, 675	7.5	7, 756	8.9	5, 615	4.6	32, 619	6.7
United Kingdom	1, 973	2.7	1, 418	1.8	228	.4	387	.5	489	.6	1, 490	1.2	5, 985	1.2
European Community subtotal	36, 291	----------	41, 509	----------	29, 633	----------	43, 209	----------	40, 698	----------	54, 244	----------	245, 504	----------
Australia	2	0	0	0	4	0	34	0	0	0	7	0	47	0
Austria	1, 644	2.2	3, 480	4.4	2, 320	4.4	2, 571	3.4	2, 667	3.1	4, 330	3.5	17, 020	3.5
Brazil	1	0	525	.7	287	.5	870	1.2	669	.8	847	.7	3, 199	.7
Canada	6, 449	8.8	10, 310	13.0	347	.3	304	.4	100	.1	83	.1	17, 393	3.5
Egypt	2	0	0	0	16	0	1, 705	2.4	622	.7	465	.4	2, 090	.6
Finland	2	0	42	.1	33	.1	268	.4	31	0	494	.4	850	.2
Greece	4, 794	6.6	4, 227	5.3	6, 438	12.2	9, 519	12.6	11, 206	13.0	13, 047	10.6	39, 311	10.1
Rhodesia	0	0	106	.1	0	0	0	0	0	0	0	0	49, 311	0
Japan	830	1.1	753	1.0	2, 346	4.5	892	1.2	2, 198	2.5	4, 110	3.3	11, 129	2.3
Norway	0	0	18	0	160	.3	0	0	5, 099	5.9	50	0	5, 327	1.1
Pakistan	0	0	0	0	0	0	9	0	0	0	0	0	9	0
Portugal	0	0	45	.1	211	.4	417	.6	0	0	62	.1	735	.1
Singapore	39	.1	57	.1	22	0	46	.1	9	0	34	0	287	0
South Korea	0	0	0	0	0	0	0	0	0	0	0	0	----------	0
Spain	7	0	1	0	123	.2	397	.5	277	.3	39	0	844	.2
Sweden	405	.6	1, 139	1.4	234	.4	1, 047	1.4	982	1.1	2, 523	2.0	6, 725	1.4
Switzerland	1, 782	2.4	1, 366	1.7	2, 128	4.0	1, 878	2.5	2, 175	2.5	2, 544	2.1	11, 873	2.4
Turkey	708	1.0	81	.1	117	.2	36	.1	3, 044	3.5	381	.3	4, 369	.8
United States	485	.7	663	.8	1, 076	2.0	2, 109	2.9	4, 469	5.1	10, 054	8.2	18, 956	3.9
Yugoslavia	19, 699	26.9	14, 831	18.7	7, 415	14.1	9, 000	13.1	12, 555	14.5	30, 005	24.3	94, 393	19.2

Source: U.N. trade data.

TABLE A-10.—COMPOSITION OF ALBANIAN EXPORTS TO 29 WESTERN NATIONS, 1974-79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	Percent of total	Average annual growth rate 1974-79
Exports to West	58.1	72.4	54.2	77.9	64.6	154.3		21.5
Foodstuffs (SITC 0, 1, 4)	5.5	10.1	7.8	15.3	14.3	14.8	9.6	21.9
Fruit and vegetables	3.9	5.4	5.6	6.3	5.8	6.4		
Tobacco	.8	2.8	.3	2.3	2.4	4.4		
Crude materials (SITC 2)	12.8	29.1	17.2	27.3	19.7	75.5	48.9	42.7
Chrome	10.4	26.0	13.5	22.1	15.6	67.7		
Crude vegetable materials	1.3	2.2	2.1	3.2	2.8	5.4		
Mineral fuels (SITC 3)	26.7	21.0	15.3	18.6	8.1	33.7	21.8	4.8
Petroleum and byproducts	22.6	16.9	12.3	18.0	7.5	28.6		
Electric energy	4.1	4.1	3.0	.6	.6	5.1		
Chemicals (SITC 5)	1.4	.5	1.3	1.1	1.7	2.4	1.6	11.4
Basic industrial goods (SITC 6)	6.9	5.6	4.7	6.9	10.8	13.1	8.5	13.7
Textile yarn	2.3	3.1	2.7	3.8	4.9	7.7		
Copper	3.8	1.3	1.2	2.5	4.8	2.4		
Machinery and transport equipment (SITC 7)	.5	0	.4	.7	.4	.9	.5	12.5
Miscellaneous manufactured goods (SITC 8)	3.6	5.3	7.5	7.9	9.5	13.7	8.9	30.6
Clothing	2.9	4.6	6.6	6.4	7.6	11.0		
Other	(1)	(1)	(1)	.1	(1)	.1	(1)	

[1] Negligible.

Source: U.N. trade data magnetic tape.

TABLE A-11.—LEADING ALBANIAN EXPORTS TO 29 WESTERN NATIONS

[Dollar amounts in thousands of U.S. dollars]

SITC	Description	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
20	Metalliferous ores and metal scrap	1	$67,696	4.9		$15,632	24.2		$22,098	28.4	
33	Petroleum and byproducts	2	28,554	10.5		7,403	11.6		17,979	21.1	
84	Clothing	3	10,951	7.1		7,615	11.8		6,408	8.2	
65	Fruit and vegetable	4	7,719	5.0		4,851	7.5		3,770	4.8	
05	Textile yarn, fabric, etc	5	6,400	4.1	78.6	5,789	9.0	64.0	6,325	8.1	72.6
29	Crude animal and vegetable materials, n.e.s	6	5,305	3.5		2,022	4.4		3,170	4.1	
35	Miscellanous manufactured goods, n.e.s	7	5,108	3.3		629	1.0		620	.8	
12	Furniture	8	3,961	2.6		2,397	3.7		2,311	3.0	
60	Nonferrous metals	9	2,369	1.5		4,776	7.4		2,468	3.2	
04	Perfume, cleaning, etc., products	10	2,129	1.4	90.9	4,134	6.4	86.9	5,051	6.5	90.1
	5-DIGIT SITC AGGREGATES										
20391	Ores and concentrates of chromium	1	67,251	43.6		15,494	23.0		21,959	28.2	
3321	Gasoline	2	10,907	7.1		1,240	1.9		637	.8	
33295	Distillate fuels	3	10,095	6.5		6,024	9.3		15,396	19.8	
3323	Women's outerwear, nonknit	4	7,551	4.9		0	0		0	0	
3510	Plants, seeds, flowers	5	5,108	3.3	65.4	629	1.0	36.1	620	.8	40.5
2924	Tomatoes, fresh	6	4,065	3.2		2,543	3.9		2,200	2.9	
04112	Petroleum bitumen percent other residues	7	4,606	3.0		4,918	7.6		4,299	5.5	
0544	Carpets	8	4,202	2.7		3,406	5.3		3,073	5.0	
1210	Outerwear, knit, nonelastic	9	3,960	2.6		2,397	3.7		2,311	3.0	
84111	Men's outerwear nonknit	10	3,144	2.0	78.9	1,432	2.2	58.8	852	1.1	67.0

TABLE A-12.—30 WESTERN COUNTRIES IMPORT TRADE SHARES FROM ALBANIA, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)
IW total	$58,122	100.0	$72,404	100.0	$54,241	100.0	$77,939	100.0	$64,602	100.0	$154,345	100.0	$481,653	100.0
Belgium-Luxembourg	1,792	3.1	160	.5	280	0.5	461	.6	729	1.1	487	.3	4,109	.8
Denmark	92	.2	114	.2	41	.1	207	.3	496	0	264	.2	1,214	.2
Federal Republic of Germany	3,623	6.2	4,011	5.6	4,692	8.7	4,753	6.1	6,162	9.5	20,548	13.3	43,011	9.0
France	2,077	3.6	2,713	3.8	2,204	4.1	4,078	5.2	3,138	4.9	6,159	4.0	20,389	4.2
Ireland	2	0	0	0	2	0	0	0	3	0	3	0	10	0
Italy	17,416	30.0	15,698	21.7	13,002	24.0	17,640	22.7	13,645	21.0	31,412	20.4	100,753	22.6
Netherlands	2,157	4.1	4,178	5.4	6,015	11.1	5,215	6.7	5,526	8.6	6,230	4.0	29,521	6.1
United Kingdom	116	.5	261	.4	72	.1	106	.1	100	.2	131	.1	986	.2
European Community, subtotal	27,675	----------	27,427	----------	26,300	----------	32,500	----------	29,699	----------	65,234	----------	208,843	----------
Australia	2	0	15	0	0	0	31	0	1	0	21	0	90	0
Austria	1,917	6.7	1,395	4.7	4,331	8.0	5,571	7.1	6,985	10.8	5,140	3.3	29,347	6.1
Brazil	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Canada	16	0	22	0	0	0	25	0	32	0	46	0	141	0
Egypt	464	.8	683	.9	55	.1	219	.3	751	1.2	1,100	.8	3,356	.7
Finland	10	0	91	.1	34	.1	717	.9	29	0	42	0	925	.2
Greece	2,950	5.1	4,585	6.1	1,997	7.4	4,544	5.8	2,176	4.3	8,650	5.6	27,502	5.7
Hong Kong	0	0	0	0	0	0	82	.1	0	0	68	0	150	0
Japan	11	0	7,574	10.5	550	1.0	3,794	4.9	180	.3	2,468	1.6	14,579	3.0
Martinque	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	4	0	1	0	0	0	1	0	3	0	7	0
Norway	34	.1	243	.3	401	.7	26	0	518	.8	929	.6	2,151	.4
Pakistan	21	0	63	.1	5	0	10	0	45	.1	0	0	144	0
Portugal	0	0	5	0	0	0	0	0	1	0	233	.2	239	0
Singapore	0	0	0	0	4	0	0	0	0	8.0	0	0	4	0
Spain	199	.7	129	.5	611	1.1	464	.6	163	.3	4,486	2.9	6,452	1.3
Sweden	1,118	2.3	2,274	3.1	1,701	3.1	4,124	5.3	2,413	3.7	10,211	11.8	10,0[illegible]1	6.2
Switzerland	189	.7	163	.5	596	1.1	949	1.2	1,163	2.1	1,414	.9	5,074	1.1
Turkey	2,626	4.5	541	.7	0	0	1,040	1.9	526	.8	3,168	2.1	9,903	2.1
United States	484	.8	2,824	1.9	2,690	5.0	3,399	4.4	1,869	6.0	10,791	7.0	24,057	5.0
Yugoslavia	11,781	10.6	21,918	30.3	12,955	23.9	10,444	23.7	15,250	23.6	12,253	20.9	118,623	24.6

TABLE A-13.—PROJECTED 1985 ALBANIAN TRADE WITH 30 WESTERN NATIONS

[In millions of U.S. dollars]

	1979	1979 percent of total	Projected 1985	1985 percent of total	Projected average annual growth rate 1980–85 (percent)
Imports from West	123.3		261		13.3
Foodstuffs (SITC 0, 1, 4)	10.2	8.3	18	6.9	9.9
Crude materials (SITC 2)	10.4	8.4	21	8.1	12.4
Mineral fuels (SITC 3)	19.2	15.6	42	16.2	13.9
Chemicals (SITC 5)	15.6	12.7	29	11.2	10.9
Basic industrial goods (SITC 6)	43.1	35.0	91	35.0	13.3
Machinery and transport equipment (SITC 7)	19.7	16.0	50	19.2	16.8
Miscellaneous manufactured goods (SITC 8)	5.0	4.1	10	3.8	12.2
Other	.1	.1	1		
Exports to the West	154.3		308		12.2
Foodstuffs (SITC 0, 1, 4)	14.8	9.6	32	10.4	13.7
Crude materials (SITC 2)	75.5	48.9	136	44.2	10.3
Mineral fuels (SITC 3)	33.7	21.8	66	21.4	11.9
Chemicals (SITC 5)	2.4	1.6	12	3.9	30.8
Basic industrial goods (SITC 6)	13.1	8.5	29	9.4	14.2
Machinery and transport equipment (SITC 7)	.9	.5	2	.6	14.2
Miscellaneous manufactured goods (SITC 8)	13.7	8.9	30	9.7	14.0
Other	.1	(1)	1	.3	
Trade turnover	277.6		569		
Balance	31.0		+47		

TABLE A-14.—PROJECTED 1985 UNITED STATES-ALBANIAN TRADE

[In millions of U.S. dollars]

				Projected 1985	
	1979	1980	1981	Low-range estimate	High-range estimate
U.S. exports	10.1	6.9	6.1	10.0	18.0
Foodstuffs (SITC 0, 1, 4)					
Crude materials (SITC 2)	.2	.2	.4	.5	1.0
Mineral fuels (SITC 3)	9.5	6.3	5.6	8.5	12.5
Chemicals (SITC 5)		(1)	(1)		
Basic industrial goods (SITC 6)					
Machinery and transport equipment (SITC 7)	.4	.3	.1	1.0	4.5
Miscellaneous manufactured goods (SITC 8)		(1)			
Other (SITC 9)		.1	(1)		
U.S. imports	10.8	12.4	4.0	9.0	19.0
Foodstuffs (SITC 0, 1, 4)		.1	.1	.5	1.0
Crude materials (SITC 2)	10.8	12.3	3.8	9.0	16.0
Mineral fuels (SITC 3)					
Chemicals (SITC 5)		(1)	.1	.5	2.0
Basic industrial goods (SITC 6)					
Machinery and transport equipment (SITC 7)					
Miscellaneous manufactured goods (SITC 8)					
Other (SITC 9)					
Trade turnover	20.9	19.3	10.1	19.0	37.0
Balance	–.7	–5.5	+2.1	+1.0	–1.0

[1] Negligible.

Source: U.S. Government.

BULGARIA: PERFORMANCE AND PROSPECTS IN TRADE WITH THE UNITED STATES AND THE WEST

By Deborah A. Lamb

CONTENTS

Page
Summary 22
Introduction 23
I. Bulgaria's Objectives and Performance in Trade With the West During the 1970's 24
II. Bulgaria's Hard Currency Debt at Yearend 1980 25
III. Bulgaria's Hard Currency Trade Objectives and Strategy: 1981–85 26
IV. Bulgaria's Hard Currency Export Capabilities: 1981–85 33
V. U.S.-Bulgarian Trade Potential Under Normalized Conditions 37
VI. Projections of U.S.-Bulgarian Trade in 1985 Under Alternative Scenarios 39

APPENDIX TABLES

A–1. Bulgarian Foreign Trade by Major Trading Groups 40
A–2. Bulgarian Hard Currency Trade, 1970–80 41
A–3. U.S.-Bulgarian Trade, 1974–81 41
A–4. Bulgarian Hard Currency Debt 41
A–5. Bulgarian Trade with the Industrialized West (I.W.) and U.S., 1974–80 42
A–6. Composition of Bulgarian Imports from the Industrialized West, 1974–80 43
A–7. Leading Bulgarian Imports from the Industrialized West 44
A–8. Origins of Top Bulgarian Imports from the Industrialized West 45
A–9. Industrialized West Export Trade Shares to Bulgaria, 1974–79 46
A–10. Composition of Bulgarian Exports to the Industrialized West, 1974–80 47
A–11. Leading Bulgarian Exports to the Industrialized West 48
A–12. Industrialized West Import Trade Shares from Bulgaria, 1974–79 49
A–13. Projected 1985 Bulgarian Trade with the Industrialized West 50
A–14. Projected 1985 U.S.-Bulgarian Trade 50

SUMMARY

Bulgaria's trade with the Industrialized West displayed impressive growth during the 1970's and early 1980's, with imports rising at an average annual rate of 10.7 percent and exports, at 12.5 percent between 1974 and 1980. During this period, Bulgaria pursued a strategy of rapidly expanding exports to the West while holding down import growth in order to reduce its mounting hard currency debt, which dropped from $3.0 billion at the end of 1979 to $2.6 billion by the end of 1980. It appears unlikely, however, that Bulgaria will succeed in keeping imports from the West at low levels, given requirements for advanced Western technology, foodstuffs, and energy supplies from sources other than the U.S.S.R.

Prospects for the future development of Bulgaria's trade with the West depend on several factors: (1) its success in keeping hard cur-

rency debt under control; (2) its ability to manufacture, market, and service goods in demand in the West; (3) its ability to develop its own agricultural and basic munfactures sectors in order to conserve hard currency for more advanced technology and equipment; and (4) the extent to which it must expand trade with OPEC countries at the expense of its trade with the West.

Projections of Bulgaria's trade with Industrialized Western countries—10.5 percent annual growth for exports and 9 percent for imports—yield 1985 exports of $1.2 billion, imports of $2.3 billion, and a trade deficit of $1.1 billion. This compares with 1980 exports of $726 million, imports of $1.5 billion, and a deficit of $764 million.

The fastest growing category of Bulgarian imports from the West in 1981–85 will probably be crude materials, expected to grow at an average annual rate of 15 percent. Oilseeds, crude fertilizers and hides are likely to remain the principal imported commodities in this group. Imports of foodstuffs (primarily grain and livestock feeds) and machinery and transport equipment (especially metal-working and other industry-specific machinery) are also expected to grow rapidly.

Bulgarian exports of both heavy and light manufactures are projected to show the fastest growth—13 percent each—in 1981–85, with foodstuffs and crude materials not far behind. Metal-working machinery and clothing are the most promising of the manufactured export items, while vegetables, tobacco, metal ores and scrap are the key exports in the agricultural products and crude materials categories.

On average, trade between the United States and Bulgaria in the 1975–80 period represented only 4.3 percent of Bulgaria's total trade with industrialized Western countries. Nevertheless, U.S. exports have risen dramatically, from $22 million in 1974 to $258 million in 1981, and imports from Bulgaria have increased from $9 million to $34 million in the same period. Trade in both directions has been concentrated in agricultural products; the U.S. has shipped mainly corn and soybean products, while Bulgaria has exported primarily tobacco.

U.S. exports to Bulgaria in 1985 may range from $260–$350 million, approximately 65 percent agricultural products. U.S. imports from Bulgaria could range from $52–$86 billion, about 75 percent of which would consist of agricultural products, mainly tobacco. Bulgaria's trade deficit would range from $208–$264 million.

INTRODUCTION

Throughout the 1970's, Bulgaria's foreign trade was a dynamic component of its overall economic performance. Bulgarian sources estimate that, over the past twenty years, foreign trade has grown at an average annual rate of 11 to 13 percent.

The bulk of Bulgaria's foreign trade, on average 80 percent, has consistently been conducted with other member countries of the Council for Mutual Economic Assistance (CMEA), with the U.S.S.R. alone accounting for 55–60 percent of total trade turnover. In the 20-year span depicted in Table A–1, the importance of Bulgaria's trade with CMEA member countries becomes apparent. In 1960, for example, Bulgarias' imports from the U.S.S.R. represented 53 percent of total imports, increasing, in 1980, to 58 percent of the total, largely reflecting higher prices of Soviet energy exports to Bulgaria. Bulgaria's exports to the Soviet Union in 1960 represented 54 percent of the total, falling in 1980 to 50 percent of total exports.

Intra-CMEA trade must be considered the cornerstone of Bulgaria's foreign trade strategy. But several developments which are characteristic of Bulgaria's trade performance over the past decade will have an important bearing on trade prospects with the rest of the world during the 1980s, including: (1) the rapid growth in total trade turnover; (2) the reduction in relative importance of imports from the West, concurrent with rapidly increasing imports, in value terms, from CMEA member countries; and (3) substantially increased exports to less-developed countries, chiefly in the Middle East.

I. BULGARIA'S OBJECTIVES AND PERFORMANCE IN TRADE WITH THE WEST DURING THE 1970s

Throughout the 1960's and 1970's Bulgaria's trading patterns with the West clearly reflected the projects given highest priority by the prevailing Five-Year Plan. The machinery, equipment and technology imported corresponded closely to projects associated with the Plan and were financed largely through heavy borrowing on Western capital markets. As the debt service burden increased and capital became tighter, Bulgaria cut back its imports from the West while expanding its hard currency-earning exports (see Table A–2).

In 1970, Bulgaria recorded a modest $22 million deficit in hard currency trade, which, fueled by a three-fold increase in imports from the West, grew to $371 million by 1974. After reaching a peak deficit of $561 million in 1975, Bulgaria slowly scaled down its deficit, to $15 million in 1977, and finally posted a hard currency trade surplus of $705 million in 1979 and nearly $1 billion in 1980. Bulgaria's success in achieving a hard currency trade surplus by the end of the 1970's was prompted largely by rapid growth of Bulgaria's hard currency exports, which increased at an average annual rate of 22.4 percent over the 1974–1980 period. At the same time, the growth in Bulgaria's imports from the developed and less-developed countries was held to an average annual rate of only 7.9 percent through the period and, in fact, absolute declines over previous years' imports from those country groups were recorded in both 1976 and 1977.

Bulgaria's trade with the United States throughout the 1970s must be regarded as a residual. Of the East European states, only Albania's trade with the U.S. was lower than that of Bulgaria. In 1979, U.S. two-way trade with Bulgaria represented slightly more than one-half of one percent of Bulgaria's total trade turnover and, of Bulgaria's total trade turnover in 1980, the U.S. share accounted for slightly under one percent.

Agricultural commodities, chiefly corn and tobacco, have dominated U.S.-Bulgarian trade. The United States has been regarded by Bulgaria primarily as a supplier of agricultural commodities, and fluctuations in U.S.-Bulgarian trade are closely correlated with the performance of Bulgaria's agricultural sector and overall demand for agricultural commodities in any given year (see Table A–3).

Despite the low absolute volume of U.S.-Bulgarian trade throughout the 1970s, there was considerable growth in trade turnover. Two-way U.S.-Bulgarian trade, which totaled $31 million in 1974, reached $292 million in 1981. U.S. exports paced trade growth, rising from $22 million in 1974 to nearly $260 million in 1981. The composition of U.S. imports from Bulgaria overwhelmingly has been dominated by agricultural commodities, which in 1981 accounted for over 88 percent of total U.S. imports.

A detailed examination of Bulgaria's past performance in trade with the West, and with the United States, is undertaken below as a preface to our estimates of Bulgaria's trade prospects in the early 1980s.

Prospects for the future development of Bulgaria's trade with the West rest on the following: (1) Bulgaria's success in keeping its hard currency debt under control; (2) its ability to manufacture and market goods for which there is a strong, continuing demand on Western markets, taking into consideration questions of quality and servicing; (3) successful and rapid development of Bulgaria's agricultural sector and basic industries to reduce dependence on the West for these types of items and permit the expenditure of hard currency for more advanced technology and equipment; and (4) the extent to which Bulgaria will have to rely on the countries of the Middle East for its energy resources, and hence, concentrate on the development of commercial ties with those countries, to the detriment of strengthening ties with the West.

II. Bulgaria's Hard Currency Debt at Year End 1980

Bulgaria's net hard currency debt, as reflected in Table A-4, increased from $723 million in 1971 to an estimated $3.6 billion by year end 1978. Bulgaria's strategy in the mid-Seventies of helping to finance imports from the West through borrowings on Western capital markets is reflected in the fact that growth in Bulgaria's net hard currency debt over the 1975-1979 period was equal to more than 35 percent of the growth in Bulgaria's imports from the West. In the late 1970s, however, Bulgaria mounted an aggressive export drive to noncommunist countries to generate hard currency and trim hard currency debt. In 1979, Bulgaria's net debt was estimated at $3.0 billion, dropped further in 1980, to an estimated $2.6 billion, and is estimated to have declined further in 1981 to an estimated $2.2 billion.

The composition of Bulgaria's debt changed significantly during the 1970's. In 1971, official credits totalling $301 million represented 41 percent of debt; by 1980, 94 percent of Bulgaria's gross debt ($4.8 billion) was owed to commercial lenders, chiefly private banks, with official credits totalling only $175 million. This distribution is important in that official credits by Western governments carry relatively longer maturities at lower, fixed interest rates, while commercial bank loans are generally shorter term and float with typically more expensive market (Eurodollar) rates. While the implications for Bulgaria's debt servicing burden are clear, Bulgaria has successfully managed its debt to date.

U.S. commercial banks, including offshore branches, carried $423 million, or some 13 percent of Bulgaria's total commercial debt in 1980. The U.S. share has decreased slightly from the 15.5 percent registered in 1977, and, indeed, Bulgaria succeeded in 1980 in reducing its debt to U.S. commercial banks by $312 million in 1980 over the 1979 level.

III. Bulgaria's Hard Currency Trade Objectives and Strategy: 1981–85

OBJECTIVES AND STRATEGY

A more detailed analysis of Bulgaria's trade with the West during the 1970s may provide a key to the outlook for Bulgaria's hard currency trade in the early 1980's. The analysis below focuses on developments in trade with 17 Industrialized Western (I.W.) [1] countries, which account for a major portion of Bulgaria's hard currency trade.

Total Industrialized Western-Bulgarian trade turnover, as noted in Table A–5, increased from $1.2 billion in 1974 to $2.2 billion in 1980, fueled chiefly by Bulgarian exports to the Industrialized West, which more than doubled over the period. Although Bulgaria succeeded in 1979 in reducing the size of its deficit with the Industrialized West, from $720 million in 1974 to $428.3 million, the deficit in trade with the Industrialized West rose again in 1980 to $764 million.

The focal point of Bulgaria's trade strategy with the Industrialized West has clearly been the European Community, which, over the 1974–1980 period accounted for approximately 75 percent of Bulgaria's trade turnover with the Industrialized West. Bulgaria's imports from the E.C. averaged 72 percent of imports from the Industrialized West over the period, while exports to the E.C. averaged 76 percent of the Industrialized Western total. The U.S. share was much lower, with Bulgarian imports from the United States averaging 4.8 percent of total imports from the Industrialized West during the seven-year period, and exports to the United States averaging 5 percent of the Industrialized Western total.

Bulgaria's 1981–1985 Five Year Plan unveiled in March 1981 represents no significant departures from previous plan goals. Emphasis is placed on the development of heavy industry as the "foundation of the economy" and on modernization and reconstruction of existing plants and equipment rather than investment in new projects. Nevertheless, greater attention is to be paid to the development of light industry, with a view toward increasing the availability of consumer goods.

In general, the Eighth Five-Year-Plan's new growth targets are less ambitious than both goals and actual performance under the previous plan. National income is slated to grow 25–30 percent, compared with an actual 40 percent growth over the 1976–80 period. Industrial output is to increase at the same rate posted during the previous Plan—35 percent; agricultural output is to grow 20 percent compared with the 12 percent growth recorded under the 1976–80 Plan; and growth in foreign trade turnover is expected to slow significantly—a planned 40 percent increase under the current Plan compared with the 100 percent increase realized under the previous Plan.

---

[1] The 17 Industrialized Western countries are: Austria, Belgium, Canada, Denmark, Finland, Federal Republic of Germany, France, Iceland, Italy, Japan, Luxembourg, Netherlands, Norway, Sweden, Switzerland, U.K., U.S.

In late 1978, Bulgarian planners introduced the practice of devising two consecutive single-year plans within the context of the Five-Year Plan, which may effectively replace the Five-Year Plan as the chief indicator of specific planning targets. The current two-year plan outlined in December 1980 reflects disappointment in Bulgaria's 1980 economic performance. Planned goals for 1981–82 were scaled down significantly from earlier targets. National income, which increased at a 5.7 percent rate in 1980, is slated to grow 5.1 percent in 1981 and 5.0 percent in 1982. As in the past, the main emphasis in industrial development will be on heavy industry, particularly machine-building, chemicals, metallurgy, and energy. Agricultural production, concentrating on grains, is slated to rise by 4.7 percent in 1981 and by 2.7 percent in 1982.

Aside from plan indicators, trends in Bulgaria's trade during the recent past may provide a clue to possible strategy for the early 1980s. The analysis above indicates that, during the 1975–79 period, Bulgaria pursued a strategy of rapidly expanding exports to the West while holding down import growth in order to address the problems created by its mounting hard currency debt. It seems unlikely, however, that Bulgaria will succeed in keeping imports from the West at such a low level, given requirements for imports of advanced Western technology, coupled with an increasing need to seek energy-related raw materials from sources other than the Soviet Union. Unpredicted agricultural shortfalls may also drain hard currency reserves. Indeed, data for 1980 and 1981 indicate that the growth rate of Bulgaria's imports from the West has risen, while the export growth rate has slowed.

U.S. exports to Bulgaria in 1981 totaled $258.1 million, 60 percent higher than the 1980 total and more than quadruple the 1979 figure. Exports of agricultural commodities grew 55 percent over 1980 figures. Bulgaria's prospective import requirements and export capabilities, based on an analysis of the recent past as a starting point, are analyzed in detail below.

BULGARIA'S IMPORT NEEDS FROM THE WEST, 1981–1985

Bulgaria's imports from the Industrialized West increased at an average annual rate of 10.7 percent over the 1974–1980 period, with the bulk of imports, 88 percent on average over the period, falling in the manufactured goods category (SITC 5–8). Imports from the European Community accounted for an average of 72 percent of total imports from the Industrialized West over the period, while the U.S. share averaged only 4.8 percent of total imports. Of note, while the composition of Bulgaria's imports from the Industrialized West as a whole, as well as from the European Community was heavily weighted in favor of manufactured goods, imports from the United States were largely agricultural commodities throughout the period. (See Table A–5.)

The share of total imports from the Industrialized West in the 1974–1980 period accounted for by high technology products averaged 11.5 percent over the period, with an average of nearly 70 percent of the total originating in European Community member countries. The

U.S. share of high technology goods imported from the Industrialized West by Bulgaria averaged only 3.6 percent of the total over the period.

A more disaggregated breakdown of Bulgaria's imports from the Industrialized West appears in Table A–6. The most dynamic sectors over the 1974–1980 period were crude materials, with an average annual rate of growth of 15.3 percent, foodstuffs, with a 19.7 percent average annual increase, and chemicals and miscellaneous manufactured goods, which posted a 11.1 and 15.1 percent average annual growth rate, respectively. The bulk of imports from the Industrialized West, almost 80 percent in 1980, consistently fell into three categories: basic industrial goods, machinery and transport equipment, and chemicals. In fact, as shown in Table A–7, all of the leading 1980 imports by product division (two-digit Standard International Trade Classification (SITC)) fell into these three categories. Bulgaria's imports throughout the 1974–1980 period, classified by major categories, are examined in detail below, accompanied by a tentative analysis of prospects for the early 1980's.

FOODSTUFFS

Bulgaria's imports of foodstuffs from the 17 Industrialized West countries have grown at an average annual rate of almost 19.7 percent, but foodstuffs as a percentage of total imports have fluctuated widely throughout the period, accounting for 8 percent of the total in 1974, falling to 3 percent in 1977 and reaching 12.4 percent of the total in 1980. This fluctuation varies inversely with the output of Bulgaria's agricultural sector, and as Bulgaria's agricultural performance is likely to continue to fluctuate in the early 1980's, so will Bulgaria's requirements for imported foodstuffs. In 1980, adverse weather conditions severely reduced agricultural output, necessitating large-scale imports of foodstuffs. The 1981 crop yield, however, particularly for grains, met planned targets, through imports were required to meet shortfalls in production of crops (corn, sugar beets) in areas stricken by drought during the summer of 1981.

Cereals and livestock feed constituted the bulk of Bulgaria's foodstuffs imports from the Industrialized West, accounting in 1980 for 68 percent of the total. Unmilled barley and oilseed cake and meal (see Table A–7) were the leading product imports in the foodstuffs category. Two interesting trends reflect an alteration in the composition of foodstuffs imports over the six-year period. Fish, which in 1974 had been imported in insignificant quantities, represented over 9 percent of total foodstuffs imports in 1980. Meat and meat preparations, on the other hand, accounted for 14 percent of Bulgaria's foodstuffs imports in 1974, but represented in 1980 only 3 percent of the total.

Over the short-term, Bulgarian imports of agricultural commodities from the Industrialized West are likely to continue at significant levels in order to meet production shortfalls. Bulgaria's agricultural sector has traditionally suffered from poor management and inefficient production methods exacerbated by uncooperative weather. In 1980, gross agricultural production declined by 4 percent, and was just offset by the 4 percent increase posted in 1981.

Data for 1980 and 1981 suggest that Bulgaria has significantly stepped up its imports of foodstuffs from the West. U.S. exports to

Bulgaria of agricultural commodities in 1980 tripled over 1979 totals, and increased a further 55 percent in 1981, to $197 million.

In the longer run, however, the need for continued large-scale importation of foodstuffs to meet production shortfalls may be reduced by the introduction in 1979 of the New Economic Mechanism in the agricultural sector, and the formation in March 1979 of a National Agro-Industrial Union to oversee all aspects of agriculture. Both programs are designed to improve production efficiency, to increase economic accountability of the agricultural sector, and to rationalize the management of agriculture production.

CRUDE MATERIALS

Imports of crude materials increased at a rapid average annual rate of 15.3 percent over the 1974–1980 period, but accounted, nevertheless, for only 6 percent of Bulgaria's total imports from the Industrialized West. The most dynamic components of this category have been crude fertilizers, pulp and paper, and hides and skins.

Indications are that the trend of increasing imports of crude materials is likely to continue, as Bulgaria's raw materials shortage becomes more pronounced. In particular, skins will continue to be imported in significant quantities to fuel the growth of Bulgaria's leather industry, which has posted a relatively high growth rate in the light industrial sector over the past several years. Crude fertilizers will continue to be an important supplement to domestic production of chemical fertilizers and will help redress planned underfulfillment of mineral fertilizers.

MINERAL FUELS

Bulgaria's imports of mineral fuels from the 17 Industrialized West countries in 1980 constituted less than one percent of total imports from the Industrialized West. And while it is unlikely that mineral fuels will become, in the 1980s, a major Industrialized West export to Bulgaria, developments in Bulgaria's energy sector may nevertheless have a significant impact on the development of trade with the West.

Bulgaria's own energy resources are limited. In 1979 and again in 1980, Bulgarian energy production did not meet expectations, though 1980 energy production increased a respectable 9.7 percent over 1979. In 1981, energy production barely met reduced plan targets, increasing 5.7 percent over 1980. The principal supplier of Bulgaria's energy needs has been the U.S.S.R., which has supplied Bulgaria with the bulk of its oil and natural gas requirements and substantial amounts of coal and electric power. Given the Soviets' current difficulties in increasing their own energy production, coupled with shortfalls in Bulgaria's planned energy production, it is likely that Bulgaria will have to look elsewhere for some of its energy needs. In addition, Bulgaria's energy requirements are projected to increase significantly in the 1980s. Anticipated emphasis on construction and mechanization of agriculture, combined with regular growth in industrial production, will require additional energy.

Indeed, given the expected growth in demand for energy and the unlikelihood that the Soviet Union will be able to expand significantly its energy exports to Bulgaria, it would appear that Bulgaria has no choice but to look beyond CMEA both for supplemental energy resources as well as for energy technology to develop its own domestic resources. Bulgaria has already begun to develop its commercial ties with certain oil producing nations in the Middle East and Africa, and the share (as noted above) of Bulgaria's trade with these developing countries has increased accordingly. In 1979, Libya, Iran, and Iraq were Bulgaria's chief trading partners among the developing countries. In 1980, hard currency fuel imports from developing countries are estimated to have reached nearly $200 million, a 28 percent jump over 1979 imports of LDC fuels.

The implications for Bulgaria's trade growth with Western countries are two-fold. The development of trade ties with the oil-producing states may be at the expense of strengthening ties with the West, given serious constraints on Bulgaria's export capabilities and the need to hold down growth in net hard currency debt. On the other hand, Bulgaria may seek to import advanced Western technology and equipment precisely in energy-related sectors, and hence, provide opportunities for increased exports from Western firms. The ten-year agreement signed in November 1979 with Occidental Petroleum, which calls for cooperation in the fields of coal, oil exploration, chemicals and petrochemicals, may be an indication of this.

CHEMICALS

In 1980, imported chemicals accounted for nearly 18 percent of total Bulgarian imports from the Industrialized West. With an average annual growth rate of 11.1 percent, and given continued Bulgarian emphasis on the chemicals industry as a high priority sector, it is likely that chemicals imports will continue to be a significant portion of total Bulgarian imports from the Industrialized West throughout the near-to-medium term.

Plastics and organic chemicals are likely to continue to pace Industrialized West export growth to Bulgaria in the 1980s. In 1980, plastic materials and chemical elements and compounds together accounted for 8.6 percent of total Bulgarian imports from the Industrialized West. Leading items in the chemicals category were polymerized and condensed products, synthetic dyestuffs, miscellaneous chemical preparations, and herbicides and fungicides.

Bulgaria's 1981–82 economic plan calls for increased production in the chemicals industry by 11 percent in 1981 and by 9.5 percent in 1982. Indeed, the chemicals industry is one of four targeted for main emphasis in industrial production plans. The other three are machine-building, metallurgy, and energy.

Bulgarian sources have indicated that they are particularly interested in industrial cooperation schemes and trade with Western firms in the following areas: installations for acrylonitrile, alkyl benzene, antibiotics, production of ethylene and phosphoric and sulphuric acids, oils, paints, varnishes, pesticides, herbicides, plastics, chemical fibers, and rubber.

BASIC INDUSTRIAL GOODS

Thirty percent of total Bulgarian imports from the Industrialized West in 1980 fell in the category of basic industrial goods. By far, the largest component is iron and steel, which alone, in 1980, accounted for 14 percent of total imports from the Industrialized West. However, three other product divisions—non-ferrous metals, textile yarns and fabrics, and metal manufactures—were among Bulgaria's leading imports from the Industrialized West in 1980, together representing an additional 7.3 percent of total imports. The leading ferrous metals products imported from the 17 Industrialized West countries in 1980 included high carbon and alloy steel, as well as coils for rerolling, angles, shapes and sections, and heavy plates and sheets.

The metallurgy sector is one of the high priority sectors of Bulgarian industry. The 1981–82 plan calls for construction of a plant in Asenovgrad for dynamos, metal sheets for transformers, and stainless steel. Construction is underway to add an additional one million tons of steel capacity in the Lenin Steel Works in Pernik, and reconstruction of the Kremikovtsk works is expected to add to capacity for production of rolled metal. The Third Metallurgical Complex near Burgas, scheduled for completion in 1985, is to include a rolling mill with yearly production capacity of 640,000 tons of profiles for machine-building and construction. It is unlikely, however, that production will come on stream in any of the plants before 1985 and prospects for continued Western exports of iron and steel and metal manufactures to Bulgaria in the near-to-medium term remain good.

Past trends in importation of nonferrous metals and textile yarns and fabrics are also likely to continue unabated, and, in general, the basic industrial goods sector will probably continue to offer the greatest opportunities, in volume terms, for Industrialized West exports to Bulgaria.

MACHINERY AND TRANSPORT EQUIPMENT

Imports of machinery and transport equipment from the Industrialized West increased at an average annual rate of 11.6 percent over the 1974–1980 period, accounting in 1980 for almost 30 percent of total Bulgarian imports from the Industrialized West. The bulk of imports in this category is comprised of electrical and nonelectric machinery, which in 1980 accounted for 25 percent of total imports from the Industrialized West. While this figure is a slight increase over the 23.8 percent share registered in 1979, it represents a decline from the 29.8 percent share recorded by machinery imports in 1978 and the 37.3 percent share registered in 1977. The drop may be attributable, in part, to Bulgarian efforts to hold down imports from the West, as well as to increased domestic production of machinery.

Transport equipment has experienced the widest fluctuations in share of total imports, to an extent reflecting the one-time nature of purchases of such equipment. In 1978, for example, imported transport equipment represented 10 percent of total imports from the Industrialized West, contrasted with 3.2 percent of the total in 1977, 4.0 percent in 1979, and 3.7 percent in 1980.

Bulgarian authorities have indicated that they are seeking Western cooperation in the following fields: telecommunications, robotics, data processing equipment and computer peripherals, transport equipment, machine tools for metals, ships, foundry machines, machines for working plastics, woodworking machines.

MISCELLANEOUS MANUFACTURED GOODS

Though the average annual growth rate of imports of miscellaneous manufactured goods from the Industrialized West has been a respectable 15.1 percent, this category accounts for only 5.0 percent of total Bulgarian imports from the Industrialized West, the bulk of which falls in the area of high technology precision instrumentation. In 1980, precision instruments accounted for 42 percent of Bulgaria's miscellaneous manufactured goods imports from the Industrialized West, in keeping with a trend discernible throughout the 1974–1980 period.

Given the fact that light industry is not a priority sector in Bulgaria's economic development scheme (light industry is targeted for 2.4 percent expansion in 1981 and 3.0 growth in 1982), as well as Bulgaria's need to conserve hard currency, it is unlikely that consumer goods from the West will become leading imports. Growth in the 1980's of Western exports of manufactured goods is likely to be led by high technology instruments, with consumer goods imported only in limited quantities.

Table A–8 indicates the origins of the five leading Bulgarian imports from the 17 Industrialized Western countries. In each of the five categories—non-electric machinery, iron and steel, electrical machinery, plastics, and chemical elements and compounds—the Federal Republic of Germany is by far the leading supplier, representing from 38–44 percent of total Industrialized West exports to Bulgaria in those categories. France and Italy are also leading suppliers overall, as indicated in Table A–9, with 11.5 and 11.6 percent, respectively, of total Industrialized West exports to Bulgaria over the past seven years. The U.S., over the 1974–1980 period, supplied an average of 4 percent of total I.W. exports to Bulgaria. Indications are that the F.R.G., France and Italy will maintain their roles as leading Industrialized Western exporters to Bulgaria throughout the 1980's.

Overall, it would appear that Bulgaria's requirements for imports from the West in the early 1980's will follow the trends developed in the 1970's, with basic industrial goods and machinery and equipment leading the list. If Bulgaria's exports are able to continue expansion at the rapid rate registered in the late 1970's, there may be significant opportunities for Western firms to increase their exports to Bulgaria in those sectors receiving greatest attention from economic planners.

In March 1980, Bulgaria promulgated a decree permitting Western equity participation in projects on Bulgarian soil. Western reaction to date has been one of uncertainty; only four joint venture agreements have been signed, though Bulgarian officials claim that they are actively negotiating with ten Western firms. The decree has, however, demonstrated Bulgaria's interest in developing longer-term-economic relationships with Western firms, as well as its recognition that the question of the hard currency debt must be addressed. On the other hand, Bulgarian demands for countertrade components in commercial transactions may dampen the interests of Western businesses who are not willing or able to accept large quantities of a limited range of countertrade products.

IV. BULGARIA'S HARD CURRENCY EXPORT CAPABILITIES: 1981–1985

Inevitably, the development of Bulgaria's trade with the West will depend on its ability to increase significantly its hard currency earning exports. The continued growth in net debt to help finance imports, as Bulgaria has already recognized, is not a long-term option, and the continued low rate of importation of high technology and equipment could significantly hinder Bulgaria's economic development plans.

As indicated in table A–10, Bulgaria's exports to the West increased at an average annual rate of 12.5 percent over the 1974–1980 period. The major portion of Bulgaria's exports to the Industralized West, ranging from 73 to 79 percent over the seven-year span, were directed toward members of the European Community, with the U.S. share averaging only 5 percent over the period.

The composition of Bulgaria's exports to the European Community is weighted in favor of manufactured goods. Over the 1974–1980 period, cumulative exports of manufactured goods to the European Community represented about 50 percent of total Bulgarian exports, while agricultural commodities accounted for 30 percent of the total. Bulgaria's exports to the U.S., on the other hand, were overwhelmingly agricultural, with cumulative agricultural exports in 1974–1980 period representing 85 percent of total Bulgarian exports to the U.S.

Trade with developing countries, particularly in the Middle East, has become an increasingly important component of Bulgaria's hard currency trade. Official Bulgarian statistics record a 39 percent increased in Bulgarian hard currency earnings exports to developing countries in 1980 over 1979 totals, accounting for nearly half of Bulgaria's total hard currency earning exports. Imports from LDCs, however, have been less significant, representing only 18 to 20 percent of total Bulgarian hard currency imports.

Bulgaria's fastest growing exports to the Industrialized West during 1974–1980 fell in the categories of mineral fuels, miscellaneous manufactured goods, and machinery and transport equipment, but foodstuffs and basic industrial goods, despite lower average annual growth rates, accounted for over half of Bulgaria's exports to the Industrialized West over the seven-year period.

FOODSTUFFS

Exports of foodstuffs to the Industrialized West in recent years have represented an average of 30 percent of total exports, ranging from a high of 50 percent of the total in 1975 to a low of 23 percent in 1980. Exports of fruits and vegetables alone, valued at $57 million, accounted for 8 percent of total exports to the Industrialized West in 1980. Tobacco exports, which had been the leading single product export to the Industrialized West in recent past, declined in importance in 1980 as its share of total exports dropped to 6.2 percent of the total, compared with 9.7 percent of total exports in 1978 and 11.4 percent in 1977.

The importance of agricultural exports in Bulgaria's foreign trade structure cannot be overstated. Agricultural exports account for a full

30 percent of total (worldwide) export revenues, though CMEA member countries are the most important markets for Bulgaria's agricultural production. Nearly half of Bulgaria's exports of fresh vegetables goes to the U.S.S.R., as well as two-thirds of its exports of canned vegetables, 85 percent of its fruit juice exports and 60 percent of its table wine exports.

Sixty percent of Bulgaria's agricultural exports to the Industrialized West from 1974–1980 were destined for European Community markets. However, given the perennial problems in Bulgaria's agricultural sector and continuing demands by the Soviet Union for the bulk of Bulgaria's exports, it would not be surprising if the growth rate of Bulgaria's agricultural exports to the European Community fell in the early 1980's, depending, of course, on harvest results. In addition, depending on crop conditions throughout the Industrialized West, prices of agricultural commodities may fluctuate considerably and hence, do not necessarily provide a stable source of export revenue. In the longer-run, that is, after 1985, Bulgaria's attempts to increase production and efficiency in the agricultural sector, as sketched above, may bear fruit. In the meantime, foodstuffs will continue to be a major, but not growing, source of hard currency for Bulgaria.

It appears probable that Bulgaria's leading export to the U.S. will continue to be tobacco, though earnings on tobacco sales to the U.S. have fluctuated, ranging from $17.2 million in 1975, to $24.2 million in 1976, $13.9 million in 1977, $14.2 million in 1978, to $25.3 million in 1979, $16.1 million in 1980, and $26.4 million in 1981.

CRUDE MATERIALS

Exports of crude materials, chiefly metallic ores and scrap and textile fibers, grew at an average annual rate of 8.6 percent from 1974 to 1980, and accounted in 1980 for 7.0 percent of total earnings on exports to the Industrialized West. Metallic ores, led by iron and steel scrap, represented 36 percent of Bulgaria's exports to the Industrialized West in this category in 1980.

It is likely that iron and steel scrap will continue to be an important hard currency export in the near-to-medium term, particularly when new iron and steel production capacity (as outlined above) comes on stream.

MINERAL FUELS

The most dynamic category of Bulgarian exports to the Industrialized West has been mineral fuels, which boasted an average annual growth rate of nearly 80 percent over the 1974–1980 period and accounted, in 1980, for 23 percent of Bulgaria's exports to the Industrialized West.

It has been assumed that Bulgaria's exports of petroleum products derive in large measure from oil imports from the U.S.S.R., which are further refined and sold on Western markets in order to boost hard currency earnings.

Bulgaria's known oil supplies are very limited. Efforts have been made to tap suspected offshore deposits in the Black Sea, but without results to date. Development of Bulgaria's energy sector has been given high priority by planners, and eventual discovery of offshore oil may, in the long-term, become a significant source of hard currency earnings.

In the meantime, it is probable that Bulgaria will continue to re-export and refine Soviet oil to boost hard currency earnings. Some analysts suggest that Bulgaria's improved balance of trade in 1979 and 1980 is largely attributable to oil refinement and re-export. Bulgarian exports of fuels are estimated to have increased from $190 million in 1978 (compared with a $149 million balance of trade surplus), to $624 million in 1979 ($658 million trade surplus) and $965 million in 1980 ($900 million to $1 billion trade surplus).[2] Bulgaria's ability to continue its strategy of increasing hard currency earnings through exports of crude and refined Soviet oil will be largely dependent on the decisions of its supplier.

CHEMICALS

Earnings from sales of chemicals to Industrialized Western markets have varied considerably over the 1974–1980 period. Sales totalled $27 million in 1974, dropped to $16.7 million in 1975, rose to $23.6 million in 1976, dipped again in 1977 to $19.8 million, and rose to $30.5 million in 1978, $37.9 million in 1979, and $60 million in 1980. Chemical exports to the Industrialized West accounted, in 1980, for 8.3 percent of earnings on exports to the Industrialized West.

The chemical sector has been targeted for high investment and growth by Bulgarian planners, and it is possible that the trend in increasing exports of chemical elements and compounds, which began in 1978, may continue into the Eighties. The European Community is the chief market among Industrialized Western countries for exports of Bulgarian chemicals. The chemicals industry in the European Community has, however, been experiencing sluggish growth, and if this trend continues, imports from Bulgaria are unlikely to increase significantly. On the whole, it appears that, at least through the early 1980's, Bulgaria will continue to be a substantial net importer of chemicals.

BASIC INDUSTRIAL GOODS

Just as basic industrial goods represent important imports to Bulgaria, so are they important exports accounting in 1980 for 18 percent of total exports to the Industrialized West. Iron and steel products represent 15 percent of the total. Iron and steel ingots, coils for rerolling, and blooms, billets, and slabs are among the most important of Bulgaria's export items.

Until the production capacity mentioned above comes on stream in the mid-Eighties, it appears unlikely that Bulgaria will be able to increase exports significantly. Also, due to transport costs, the most probable market for shipments of iron and steel will continue to be the European Community, whose steel industries have themselves been experiencing serious problems; import curbs have been considered as partial remedies. On balance, Bulgaria will continue to be a net importer of iron and steel through the foreseeable future.

---

[2] See: Wharton Econometric Forecasting Associates, Inc. Centrally Planned Economics News Analysis, October 30, 1981.

MACHINERY AND TRANSPORT EQUIPMENT

According to official Bulgarian sources, exports of machinery and transport equipment comprise between 45 and 50 percent of total Bulgarian exports. In 1980, Bulgarian exports to the Industrialized West in this category represented, however, only 8 percent of total exports. Non-electric machinery led the field of Bulgarian exports to the Industrialized West, accounting in 1980 for over 70 percent of the total. Machine tools for working metals, fork lift trucks, and electric power machinery were among key items exported.

In the CMEA specialization scheme, Bulgaria is a leading producer of machinery, and as such, spill-over exports to Industrialized Western markets are expected. Exports to the Industrialized West increased at an average annual rate of 13.7 percent over the 1974–1980 period. In our estimation, it would appear that, if Bulgaria is to penetrate significantly into Western markets, one key to such expansion lies in the longer run with exports of machinery.

The machine-building sector is one of the four priority sectors of Bulgarian industrial development. Production is slated to grow by 8.1 percent in 1981 and 8.4 percent in 1982. Growth has been concentrated in the areas of heavy-duty machinery for the chemicals, energy, metallurgical and mining industries, transport equipment, machine tools, ships and computing equipment. In addition, production of a number of industrial items, among them electric motors, tractors, telephone receivers and typewriters, is earmarked for export.

While there may be some potential for near-to-medium term growth in the exports of machinery and transport equipment, significant obstacles—including problems of quality, lack of spare parts and servicing—are likely to hinder rapidly increasing exports in this category.

MISCELLANEOUS MANUFACTURED GOODS

The share of miscellaneous manufactured goods in the composition of Bulgaria's exports to the 17 Industrialized Western countries has hovered around the 11 percent mark throughout the 1974–1980 period. The average annual rate of growth of miscellaneous manufactured exports, at 13.0 percent over the seven-year period, closely parallels the overall growth of Bulgaria's exports to the Industrialized West.

Clothing has been by far the most important export falling in this category, representing in 1980 8.5 percent of total Bulgarian exports to the Industrialized West. Such items as women's and girls' outergarments, men's and boys' under- and outergarments, and fur clothing were leading export items in 1979. (See Table A–11). However, given difficulties in West European and U.S. textile industries, as well as perennial problems of product quality and styling, it is unlikely that Bulgarian clothing exports will become more important hard currency earners in the early 1980s.

A basic constraint on Bulgaria's ability to export miscellaneous manufactured goods will continue to be the need to try to satisfy domestic consumer demand.

Based on the foregoing analysis of Bulgaria's export capabilities and import requirements, Table A–13 sets forth projections of Bulgaria's trade with the Industrialized West in 1985. We have assumed that the rate of growth of Bulgaria's imports from the Industrialized West will increase somewhat, to an average annual rate of 9 percent over the 1980–1985 period, to help meet the goals of Bulgaria's ambitious industrialization plans, and that the rate of growth of Bulgaria's exports to the Industrialized West will fall, from the 14.6 percent rate recorded in the 1974–1979 period, to an estimated average annual rate of 10.5 percent.

We have assumed that Bulgaria will not be able to sustain the almost 90 percent average annual rate of growth of petroluem product exports. If, however, Bulgaria continues to export crude and refined Soviet oil at levels comparable to those achieved in the late Seventies, the average annual rate of growth of Bulgaria's exports could be significantly higher.

Imports will continue to be led by basic industrial goods, chemicals and advanced equipment and machinery. It has been assumed, however, that the rate of growth of both imports of chemicals and of basic industrial goods will show a decline in the early Eighties as planned Bulgarian production comes on stream. These declines may be offset to some degree by an anticipated increase in the rate of growth of machinery and transport equipment imports, as Bulgaria attempts to meet plan targets.

V. U.S.-BULGARIAN TRADE POTENTIAL UNDER NORMALIZED CONDITIONS

Important existing constraints on the development of U.S. trade with Bulgaria place a definite ceiling on expectations for the growth of two-way trade. Key constraints on the growth in U.S. imports from Bulgaria include lack of Most-Favored-Nation tariff treatment,[8] problems of quality and servicing of manufactured goods, and variable demand for tobacco in the United States. More important, perhaps, such factors as the small size of the Bulgarian market, particularly for certain manufactured goods, price considerations and the growing interest in developing trade with LDC (particularly Middle Eastern) and CMEA partners may inhibit growth of U.S. exports to Bulgaria. The composition of U.S. exports to and imports from Bulgaria is examined below.

U.S. EXPORTS TO BULGARIA

U.S. exports to Bulgaria have traditionally been dominated by agricultural commodities. From 1976 through 1981, agricultural commodities, chiefly corn and soybean oil cake and meal, represented between 73 and 83 percent of total U.S. exports to Bulgaria. In 1981, agricultural commodities accounted for 88 percent of total exports to Bulgaria.

---

[8] The Trade Act of 1974 established certain restrictions on U.S. trade with non-market economy countries. Section 402 (the Jackson-Vanik amendment) stipulates that communist countries not already receiving non-discriminatory tariff treatment at the time of the Act's entry into force will be ineligible for bilateral commercial agreements, Most-Favored-Nation tariff treatment, and official export credits and investment guaranties unless those countries permit free emigration. The President may waive this requirement if such a waiver and subsequent extension of MFN have the effect of improving emigration flows from the given countries. If MFN is extended under this clause, the renewal of the President's waiver authority must be reviewed annually by both Houses of Congress. Bulgaria currently does not receive MFN treatment for its exports to the U.S. and is not eligible for Export-Import or CCC credits.

The composition of non-agricultural exports to Bulgaria has varied considerably over the past several years, since most large-scale purchases, particularly of machinery and equipment, often represent one-time transactions in response to planned industrial development priorities. Leading exports have included precision instruments, computer peripherals and office machines, blue jeans, and loading and unloading machinery. Over the near-to-medium term, precision instruments are expected to play a leading role in U.S. exports, and opportunities may develop for exports of energy-related machinery and technology, electronics apparatus and devices, and computing equipment.

Tobacco has dominated the composition of U.S. imports from Bulgaria, accounting for 94 percent of the total in 1976, dropping to 73 percent in 1979 and rising to 77 percent in 1981. Even under normalized conditions, tobacco would probably continue to be Bulgaria's leading export to the United States. Other agricultural products, such as cheese and paprika, would also be important, and wine, which was first exported to the United States in 1980, is likely to become a more important Bulgarian export.

MFN-induced increases in imports of manufactured goods might be expected to increase total imports from Bulgaria somewhat. But certain of the items which Bulgaria exports to the United States and which would enjoy the sharpest tariff cuts include such products as clothing, leather footwear, and glassware, all of which might meet resistance from import-sensitive U.S. industries. Other products such as chemicals and iron and steel, which have been important manufactured exports to the Industrialized West as a whole, may not increase significantly in spite of more favorable tariff rates. Transportation costs militate against large-scale Bulgarian iron and steel exports to the United States, and the U.S. chemical industry is sensitive to imports.

In recent years, Bulgaria has persistently sought from the European Community the extension of the Generalized System of Preference (GSP) tariff regime accorded to developing countries. If MFN were granted to Bulgaria, and the other conditions of IMF and GATT membership were met, Bulgaria would probably seek GSP treatment from the United States. With GSP, Bulgaria's exports to the United States of light manufactured goods would increase, although increased penetration would be hindered by the same problems of quality and import sensitivity in U.S. industries that would be experienced under the case of MFN extension.

In general, then, even if trade between Bulgaria and the U.S. were fully normalized, the established pattern would probably continue in much the same form. Aside from agricultural commodities and, possibly, certain higher technology goods, Bulgaria's demands for machinery and basic industrial goods and raw materials are likely to be met by Western European suppliers, by reason of geographic proximity and availability. And, except for tobacco, Bulgaria has very little to offer the United States that would compete on quality terms with other suppliers.

VI. PROJECTIONS OF U.S.-BULGARIAN TRADE IN 1985 UNDER ALTERNATIVE SCENARIOS

Table A–1 offers two sets of estmates for projected U.S.-Bulgarian trade in 1985—a low range estimate based on the assumption that past trade trends will continue, and a high-range estimate based on the assumption that trade has been fully normalized, i.e. MFN has been extended and CCC and Eximbank credits have been made available.

Assuming fully normalized trade relations with Bulgaria by 1985, two-way trade could increase sharply over 1981 totals, led by growth in both exports and imports of agricultural commodities and machinery and transport equipment. Tobacco would continue to dominate Bulgaria's exports to the U.S., but machinery and other manufactured goods would assume a larger share of total exports to the United States. U.S. exports to Bulgaria would continue to be dominated by agricultural goods, but exports of technology equipment would increase significantly. Under the low-range estimate, assuming present trends, two-way trade would amount to about $320 million by 1985. The high range estimate places total turnover in the $440 million range. In both cases, the U.S. would continue to enjoy a sizable trade surplus.

APPENDIX

TABLE A-1.—BULGARIAN FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960–80

[Dollar amount in million]

	1960		1970		1974		1978		1979		1980[1]	
	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
Imports	$625	100.0	$1,831	100.0	$4,278	100.0	$7,658	100.0	$8,580	100.0	$9,339	100.0
Of which:												
U.S.S.R	332	53.1	955	52.2	1,858	43.4	4,571	59.7	5,042	58.8	5,450	58.3
East Europe	174	27.8	372	20.3	932	21.8	1,433	18.7	1,587	18.5	1,620	17.3
Developed countries	89	14.2	355	19.4	990	23.1	1,151	15.0	1,321	15.4	1,657	17.7
Less developed countries	13	2.1	81	4.4	302	7.1	249	3.3	300	3.5	376	4.0
Exports	571	100.0	2,004	100.0	3,790	100.0	7,485	100.0	9,013	100.0	10,163	100.0
Of which:												
U.S.S.R	307	53.8	1,078	53.8	1,900	50.1	4,048	54.1	4,673	51.8	5,063	49.8
East Europe	151	26.4	431	21.5	790	20.8	1,506	20.1	1,622	18.0	1,680	16.5
Developed countries	73	12.8	289	14.4	466	12.3	763	10.2	1,298	14.4	1,719	16.9
Less developed countries	18	3.2	125	6.2	455	12.0	785	10.5	1,037	11.5	1,374	13.5

[1] Preliminary USG estimates.

Source: CIA, Handbook of Economic Statistics, November 1981.

TABLE A-2.—BULGARIAN HARD CURRENCY TRADE,[1] 1970-80

[Millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	1980[2]	Average growth growth rate, 1974-80 (percent)
Imports	436	1,292	1,498	1,282	1,282	1,400	1,604	2,033	7.9
Exports	414	921	937	1,054	1,267	1,548	2,309	3,093	22.4
Trade turnover	850	2,213	2,435	2,336	2,543	2,948	3,913	5,126	
Balance	−22	−371	−561	−228	−15	148	705	1,060	

[1] Includes developed and less developed countries.
[2] Preliminary.

Source: CIA, Handbook of Economic Statistics, November 1981.

TABLE A-3.—UNITED STATES-BULGARIAN TRADE, 1974-81

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1981
U.S. exports	22.0	29.3	43.3	23.9	48.1	56.2	160.7	258.1
Of which:								
Agricultural	15.8	9.5	31.6	20.1	39.9	41.0	127.3	197.3
Manufactured[1]	5.9	19.6	9.4	2.4	7.8	10.7	29.8	50.2
Other	.3	.2	2.3	1.4	.4	4.6	3.6	10.6
U.S. imports	8.9	20.2	27.0	18.0	19.0	34.7	24.9	34.1
Of which:								
Agricultural	7.7	19.5	26.3	15.3	16.2	27.8	19.1	30.1
Manufactured[1]	.8	.5	.6	2.3	2.8	6.0	5.7	4.0
Other	.4	.2	.1	.4	(2)	.9	.1	(2)
Trade turnover	30.9	49.5	70.3	41.9	67.1	90.9	185.6	292.
Balance	+13.1	+9.1	+16.3	+5.9	+29.1	+21.5	+135.8	+224.2

[1] SITC 5-8.
[2] Negligible.

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-4.—BULGARIAN HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1971	1975	1976	1977	1978	1979	1980
Commercial debt	442	2,453	2,878	3,394.0	3,800	3,600	3,200
Of which:							
Owed to U.S. banks	(1)	(1)	(1)	527.6	591	558	423
Officially backed debt	301	187	320	313.0	310	250	175
Of which:							
Guaranteed export credits	301	187	320	313.0	310	250	175
U.S. Exim bank							
CCC credits							
Gross debt	743	2,640	3,198	3,707.0	4,200	3,800	3,400
Commercial assets	(20)	(383)	(442)	(538.0)	(600)	(800)	(800)
Net debt	723	2,257	2,756	3,169.0	3,600	3,000	2,600

[1] Not available.

Source: U.S. Government.

TABLE A-5.—BULGARIAN TRADE WITH THE INDUSTRIALIZED WEST (IW) AND UNITED STATES, 1974–80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980
Imports from IW	$809.0	$1,045.5	$833.1	$830.7	$1,017.2	$1,136.0	$1,489.6
United States	$22.0	$29.2	$43.3	$23.9	$48.1	$56.2	$160.7
U S. share (percent)	2.7	2.8	4.9	2.9	4.7	4.9	10.8
European Community	$586.0	$806.9	$640.2	$620.5	$685.6	$823.5	$1,008.0
European Community share (percent)	72.4	77.2	72.5	74.8	67.4	72.5	67.7
Of which:							
Foodstuffs [1]	$63.1	$51.1	$74.7	$28.2	$79.4	$101.4	$184.9
United States	$15.1	$19.3	$30.8	$1.5	$38.7	$31.2	$126.1
U.S. share (percent)	23.9	37.8	41.2	5.3	48.7	30.8	68.1
European Community	$42.0	$29.1	$35.5	$23.1	$35.0	$57.1	$42.3
European Community share (percent)	66.6	56.9	47.5	81.9	44.1	56.3	22.9
Manufactured [2]	$714.6	$955.6	$776.0	$763.7	$896.0	$952.7	$1,226.1
United States	$5.8	$9.6	$9.4	$20.1	$7.8	$10.6	$29.8
U.S. share (percent)	0.8	1.0	1.2	2.6	0.8	1.1	2.4
European Community	$522.4	$746.7	$585.4	$573.1	$616.8	$706.7	$904.6
European Community share (percent)	73.1	78.1	75.4	75.0	68.8	74.2	73.8
High technology	$87.7	$032.4	$110.4	$107.6	$116.3	$105.8	$156.0
United States	$2.4	$4.1	$3.3	$5.2	$3.9	$3.8	$9.7
U.S. share (percent)	2.7	3.1	3.0	4.8	3.4	3.6	6.2
European Community	$54.3	$101.8	$79.6	$78.5	$78.7	$74.5	$110.0
European Community share (percent)	61.9	76.9	72.1	73.0	67.7	70.4	70.5
Exports to IW	$358.0	$324.8	$383.2	$398.6	$481.5	$707.7	$725.6
United States	$8.4	$20.2	$27.0	$18.0	$20.3	$37.0	$27.3
U.S. share (percent)	2.3	6.2	14.2	4.5	4.2	5.2	3.8
European Community	$269.8	$236.1	$284.5	$299.6	$370.9	$561.1	$570.5
European Community share (percent)	75.4	72.7	74.2	75.2	77.0	79.3	78.6
Trade turnover with IW	$1,167.0	$1,370.3	$1,266.3	$1,229.3	$1,498.7	$1,843.7	$2,215.2
Balance	—$451.0	—$720.7	—$499.9	—$432.1	—$535.7	—$428.3	$764.0
Balance with United States	—$13.6	—$9.0	—$16.3	—$5.9	—$27.8	—$19.2	—$133.4
Balance with European Community	—$316.2	—$570.8	—$355.7	—$320.9	—$425.4	—$262.4	—$334.1

[1] SITC 0, 1, 4.

[2] SITC 5–8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF BULGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST (IW), 1974-80

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of total, 1980	Average annual growth rate 1974-80 (percent)
Imports from IW	809.0	1,045.5	883.1	830.7	1,017.2	1,136.0	1,489.6	100.0	10.7
Foodstuffs (SITCO 1, 4)	63.1	51.1	74.7	28.2	79.5	101.4	184.9	12.4	19.7
Cereals	27.9	19.6	32.3	1.7	29.6	34.4	80.6		
Livestock feed	6.6	6.9	8.1	7.6	16.5	24.4	44.7	-------	-------
Fish	(1)	.3	.2	.5	9.2	7.6	9.2	-------	-------
Dairy products	2.9	2.9	6.2	3.4	3.5	7.4	4.7	-------	-------
Meat and meat preparations	3.9	9.0	9.6	2.6	(1)	.1	3.4	-------	-------
Beverages and tobacco	2.5	4.2	5.0	4.7	9.0	17.3	27.0		48.8
Oils and fats	1.7	1.0	1.4	1.7	1.6	1.9	1.9	-------	-------
Other	12.7	7.3	11.9	6.0	10.1	8.3	13.9	-------	-------
Crude materials (SITC 2)	23.3	22.0	22.0	22.3	29.3	61.3	54.6	3.7	15.3
Hides and skins	7.0	4.3	6.0	4.2	7.8	15.2	9.7	-------	-------
Crude fertilizers	.3	1.3	.4	2.3	2.4	9.5	10.6	-------	-------
Oil seeds	.1	.1	.1	.6	(1)	9.2	(1)	-------	-------
Pulp and paper	.9	4.7	4.6	6.4	4.0	8.3	10.1	-------	-------
Metalliferous ores and metal scrap	3.6	3.2	5.7	.4	1.3	6.5	11.6	-------	-------
Other	12.5	8.4	5.2	8.6	13.8	12.6	12.6	-------	-------
Mineral fuels (SITC 3)	4.0	9.8	2.8	7.6	3.8	5.3	8.3	0.6	12.9
Coal, coke, briquettes	1.2	5.4	(1)	0	0	2.6	4.3	-------	-------
Petroleum products	2.3	4.4	2.8	7.6	3.8	2.5	3.9	-------	-------
Other	0	0	0	0	0	.2	.1	-------	-------
Chemicals (SITC 5)	138.6	122.4	121.7	138.8	167.3	214.7	260.3	17.5	11.1
Plastic materials	30.3	27.3	29.8	31.5	41.3	53.9	62.0	-------	-------
Chemical elements and compounds	45.9	37.1	33.4	36.7	43.9	57.3	68.9	-------	-------
Organic	(32.6)	(27.2)	(26.5)	(27.1)	(33.2)	(43.7)	(51.7)	-------	-------
Inorganic	(13.3)	(9.9)	(6.9)	(9.6)	(10.7)	(13.6)	(17.2)	-------	-------
Dyes, tanning products	19.7	16.5	19.1	20.8	27.8	32.7	37.5	-------	-------
Pharmaceutical products	10.6	10.7	7.2	10.4	13.9	14.8	15.3	-------	-------
Essential oils, perfumes, soaps	9.3	7.9	8.3	8.6	9.6	11.8	14.0	-------	-------
Other	6.3	22.9	23.9	30.8	30.3	39.2	62.6	-------	-------
Basic industrial goods (SITC 6)	314.1	303.7	218.0	247.3	294.8	372.2	448.2	30.0	6.1
Iron and steel	162.0	152.7	73.7	96.5	137.7	135.7	211.3	-------	-------
Nonferrous metals	28.9	17.3	13.0	22.5	23.9	40.9	60.6	-------	-------
Textile yarn, fabric	44.3	43.3	45.3	39.4	41.9	39.3	38.8	-------	-------
Metal manufacturers	28.4	38.6	32.6	35.7	31.5	35.6	43.8	-------	-------
Paper, paperboard	30.9	22.2	22.5	21.0	23.4	32.0	41.0	-------	-------
Nonmetallic mineral manufacturers	7.5	13.5	13.6	15.8	14.2	16.2	25.9	-------	-------
Other	12.1	15.6	16.9	16.1	17.2	31.7	26.8	-------	-------
Machinery and transport equipments (SITC 7)	229.7	497.7	403.9	336.3	395.4	316.0	443.1	29.7	11.6
Nonelectric machinery	146.6	330.1	295.0	242.5	218.3	198.1	267.1	-------	-------
Electrical machinery	52.3	67.8	59.6	67.4	81.9	82.2	109.6	-------	-------
Transport equipment	30.3	99.8	49.3	26.9	101.2	45.7	55.8	-------	-------
Miscellaneous manufactured goods (SITC 8)	32.2	31.8	32.4	40.6	38.5	49.8	74.6	5.0	15.1
Precision manufacturing goods	15.9	17.6	13.9	21.0	19.2	22.6	35.3	-------	-------
Clothing	3.6	1.3	1.4	1.7	3.0	6.4	8.4	-------	-------
Other	11.3	11.8	13.9	16.8	15.1	18.8	29.2	-------	-------
Other	4.1	7.0	7.6	8.9	8.6	15.3	15.6	1.0	25.0

[1] Negligible.

Source: U.N. trade data, magnetic tapes.

TABLE A-7.—LEADING BULGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST (IW)

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1973 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Machinery, nonelectric	1	$108,036	16.6		$212,347	20.9		$242,444	29.2	
67	Iron and steel	2	185,609	16.3		137,724	13.5		96,537	11.6	
72	Electrical machinery	3	82,242	7.2		81,861	8.0		67,413	0.1	
50	Plastic materials	4	58,888	5.2		41,286	4.1		31,544	3.0	
51	Chemical elements and compounds	5	57,377	5.1	50.4	43,912	4.3	50.8	36,653	4.4	57.1
73	Transport equipment	6	45,709	4.0		101,211	10.0		26,924	3.2	
60	Nonferrous metals	7	40,880	3.6		28,940	2.8		22,153	2.7	
65	Textile yarn, fabrics	8	39,292	3.5		41,915	4.1		39,144	4.7	
59	Chemical products, n.e.s	9	37,790	3.3		29,963	2.9		29,186	3.5	
69	Metal manufactures, n.e.s	10	35,581	3.1	67.9	31,457	3.1	73.8	35,732	4.3	75.6
	Top 50 total		1,127,227			1,012,461			824,457		
	Total imports from 17 IW		1,135,931			1,017,159			830,660		
	Top 50 as percent of total imports from 17 IW		99.2			99.5			99.3		
	5-DIGIT SITC AGGREGATES										
7190	Other machines, nonelectric	1	38,790	3.4		69,270	6.0		49,459	6.0	
6702	Iron, steel tube, seamless, n.e.s	2	30,869	2.7		30,161	3.0		17,195	2.1	
0430	Barley, unmilled	3	28,256	2.5		4,042	.4		14	0	
5012	Polymerized products	4	28,046	2.5		15,223	1.5		10,311	1.2	
67271	Iron, simple steel coils	5	26,972	2.4	13.6	12,830	1.2	12.9	6,225	.7	10.0
0813	Oilseed cake and meal	6	23,330	2.1		11,637	1.1		7	0	
5811	Products of condensation, etc.	7	20,000	1.0		16,821	1.7		12,644	1.5	
53101	Synthetic, organic dyes	8	18,472	1.6		16,551	1.6		11,141	1.3	
59999	Chemical preparation, n.e.s	9	16,380	1.4		9,820	1.0		9,450	1.1	
72996	Electrical carbons	10	16,173	1.4	21.0	8,374	0	19.1	7,079	.9	14.9
73289	Parts for motor vehicles	11	15,579	1.4		12,452	1.2		18,843	2.3	
7151	Machine tools for metal	12	12,672	1.1		22,030	2.2		14,830	1.8	
67311	Angles, shapes, sections of iron, steel	13	12,631	1.1		7,167	.7		2,906	.3	
2111	Bovine and equine hides	14	12,615	1.1		7,661	0		3,966	.5	
67411	Iron, steel heavy plate	15	11,325	1.0	27.5	3,545	.3	24.3	2,729	.3	20
5992	Pesticides, disinfectants	16	11,197	1.0		11,949	1.2		11,732	1.4	
7115	Piston engines, nonair	17	10,328	.9		6,900	.7		7,654	.9	
67433	Alloy steel, thin, uncoated	18	10,139	.9		8,760	.9		10,369	1.2	
6291	Rubber tires	19	9,923	.9		6,443	.6		6,612	0	
7222	Switchgear	20	9,827	.9	32.0	9,161	.9	20.6	11,521	1.4	25.8
7333	Trailers, other vehicles not motorized	21	9,634	0		8,600	.7		2,095	.3	
67483	Alloy steel, thin, coated, n.e.s	22	9,552	0		6,270	.6		15	0	
2210	Oilseeds, nuts, kernels	23	9,141	0		14	0		0	0	
71715	Textile machinery, n.e.s	24	9,024	0		3,462	.3		12,697	1.5	
68422	Aluminum plates, sheets, strips	25	8,708	0	36.1	7,040	.7	30.9	5,496	.7	28.3
	Top 50 total		585,130			452,586			365,070		
	Total imports from 17 IW		1,135,981			1,017,159			830,660		
	Top 50 as percent of total imports from 17 IW		51.5			44.5			43.9		

Source: U.S. trade data, magnetic tapes.

TABLE A-8.—ORIGINS OF TOP BULGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

1979 item rank	SITC	Description: Origin	1979 Origin rank	1979 Value	1979 Item/origin percent of total	1977 Origin rank	1977 Value	1977 Item/origin percent of total
1	71	Machinery non-electric		$188.0	16.6	--------	$242.4	29.2
		Federal Republic of Germany	1	84.4	44.9	1	94.2	38.8
		France	2	19.0	10.1	2	37.8	15.6
		Italy	3	17.6	9.3	3	21.8	9.0
		United States	9	3.6	1.9	7	11.9	4.9
		European Community		141.0	75.0	--------	177.0	73.0
	67	Iron and steel		185.7	16.3	--------	96.5	11.6
		Federal Republic of Germany	1	67.0	36.1	1	35.8	37.1
		Italy	2	32.8	17.6	2	20.5	21.2
		France	3	32.1	17.4	3	16.0	16.6
		Austria	4	21.4	11.5	4	10.3	10.7
		United States	16	(1)	0	16	0	0
		European Community		143.0	77.0	--------	80.2	83.1
3	72	Electrical machinery		82.2	7.2	--------	67.4	8.1
		Federal Republic of Germany	1	31.4	38.2	1	19.2	28.4
		Japan	2	9.4	11.4	2	15.4	22.9
		France	3	8.7	10.6	3	7.6	11.2
		Italy	4	8.4	10.3	4	5.8	8.7
		United States	8	2.2	2.7	5	4.0	5.9
		European Community		56.8	69.1	--------	49.1	72.8
4	58	Plastic materials		58.9	5.2	--------	11.5	3.8
		Federal Republic of Germany	1	20.1	34.1	1	13.5	42.7
		Italy	2	11.0	18.6	2	3.5	11.1
		France	3	8.4	14.2	3	3.3	10.3
		United States	12	(1)	.1	12	.2	.6
		European Community		49.2	83.5	--------	25.4	80.6
5	51	Chemical elements and compounds		57.4	5.1	--------	36.7	4.4
		Federal Republic of Germany	1	18.0	31.3	1	11.4	11.2
		Italy	2	9.3	16.2	2	5.2	14.3
		United Kingdom	3	5.9	10.3	1	4.2	11.5
		Switzerland	4	5.4	9.5	4	3.6	9.9
		United States	15	.1	.2	11	.4	1.2
		European Community		44.7	77.9	--------	28.7	78.2

[1] Negligible.

Source: U.N. trade data, magnetic tapes.

TABLE A-9.—INDUSTRIALIZED WEST (IW) EXPORT TRADE SHARES TO BULGARIA, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW total	$809, 022	100.0	$1, 045, 523	100.0	$883, 093	100.0	$830, 660	100.0	$1, 017, 159	100.0	$1, 135, 981	100.0	$5, 721, 438	100.0
Belgium-Luxembourg	33, 590	4.2	38, 432	3.7	24, 648	2.8	29, 564	3.6	32, 618	3.2	43, 789	3.9	202, 641	3.5
Denmark	8, 306	1.0	11, 058	1.1	8, 814	1.0	6, 172	.7	12, 666	1.2	6, 938	.6	53, 954	.9
Federal Republic of Germany	298, 184	36.9	415, 910	39.8	338, 135	28.3	291, 269	35.1	357, 092	35.1	395, 332	34.8	2, 059, 992	36.6
France	74, 976	9.3	122, 232	11.7	102, 239	11.6	123, 371	14.9	93, 761	9.2	141, 744	12.5	658, 323	11.5
Ireland	1, 365	.2	843	.1	1, 736	.2	1, 001	.1	2, 103	.2	5, 900	.5	12, 948	.2
Italy	95, 181	11.8	131, 621	12.6	95, 646	10.8	97, 981	11.8	108, 302	10.6	135, 756	12.0	664, 487	11.6
The Netherlands	32, 345	4.0	35, 130	3.4	27, 632	3.1	27, 573	3.3	28, 130	2.8	35, 965	3.2	106, 775	3.3
United Kingdom	42, 081	5.2	51, 660	4.9	41, 369	4.7	43, 592	5.2	50, 921	5.0	58, 107	5.1	287, 738	5.0
European Community sub-total	586, 028	----------	806, 894	----------	640, 219	----------	620, 523	----------	685, 593	----------	823, 531	----------	4, 162, 788	72.8
Austria	56, 494	7.0	66, 722	6.4	53, 092	6.0	49, 365	5.9	62, 322	6.1	95, 110	8.4	383, 105	6.7
Canada	5, 409	.7	2, 494	.2	6, 496	.7	7, 100	.5	4, 237	.4	7, 999	.7	30, 735	.5
Finland	7, 314	.9	5, 900	.6	6, 994	.8	7, 174	.9	8, 541	.8	16, 430	1.4	53, 061	.9
Japan	73, 716	9.1	54, 175	5.2	47, 044	5.3	50, 757	6.1	55, 399	5.4	45, 006	4.0	326, 097	5.7
Norway	5, 289	.7	4, 017	.4	3, 581	.4	3, 610	.4	76, 277	7.5	5, 244	.5	98, 018	1.7
Sweden	21, 024	2.6	37, 827	3.6	30, 597	3.5	25, 099	3.0	20, 923	2.1	25, 901	2.3	161, 371	2.9
Switzerland	31, 783	3.9	30, 195	3.7	51, 750	5.9	45, 422	5.5	55, 747	5.5	60, 527	5.3	283, 424	5.0
United States	21, 965	2.7	29, 299	2.8	43, 320	4.9	23, 910	2.9	40, 120	4.7	50, 225	4.9	222, 838	3.9

Source: U.N. trade data, magnetic tapes.

TABLE A-10.—COMPOSITION OF BULGARIAN EXPORTS TO THE INDUSTRIALIZED WEST (IW), 1974-80

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of total, 1980	Average annual growth rate 1974-80 (percent)
Exports, total	358.0	324.8	383.2	398.5	421.5	707.7	725.6	100.0	12.5
Foodstuffs (SITC 0, 1, 4)	124.9	158.9	165.0	150.6	183.4	212.8	167.5	23.1	5.0
Fruits and vegetables	51.1	59.7	55.5	60.7	75.4	77.7	57.4		
Meat and meat preparations	11.7	18.9	22.7	16.2	18.4	22.5	15.5		
Dairy products	5.2	6.7	8.3	6.5	11.9	14.7	14.4		
Live animals	7.7	22.2	5.4	2.7	7.7	8.6	8.0		
Beverages and tobacco	33.1	32.9	62.0	51.7	51.3	68.4	59.0		
Oils and fats	9.3	3.0	3.8	3.1	3.5	4.4	1.6		
Other	5.5	5.5	6.1	9.7	11.2	16.5	10.6		
Crude materials (SITC 2)	30.8	19.3	25.9	27.8	32.9	53.0	50.5	6.9	8.6
Metalliferous ores and metal scrap	.3	5.1	3.5	3.0	4.3	19.1	18.0		
Textile fibers	6.8	4.6	12.0	12.1	11.9	11.6	9.7		
Crude mineral and vegetable materials	3.2	5.1	5.6	6.9	7.9	9.6	9.3		
Oil seeds, nuts	3.4	1.4	1.5	2.8	4.0	4.3	5.0		
Mineral fuels (SITC 3)	4.9	5.7	3.2	15.0	36.0	120.3	163.8	22.6	79.7
Petroleum products	4.8	5.7	3.2	13.9	36.0	120.1	162.2		
Other	.1	0	0	1.1	0	.2	1.6		
Chemicals (SITC 5)	27.0	16.7	23.6	19.8	30.5	37.9	60.2	8.3	14.3
Chemical elements and compounds	16.1	9.4	9.8	12.1	22.0	35.0	45.0		
Organic	(9.8)	(7.6)	(7.5)	(6.1)	(14.4)	(14.2)	(23.7)		
Inorganic	(16.3)	(1.9)	(2.3)	(4.0)	(7.6)	(10.8)	(21.3)		
Perfume, essential oils	4.1	2.0	3.4	3.4	4.4	5.5	3.9		
Medicinal, pharmaceutical products	3.5	1.6	3.1	2.7	2.7	4.4	4.3		
Other	3.3	3.7	7.3	1.6	1.4	3.0	7.0		
Basic industrial goods (SITC 6)	97.4	54.4	83.6	102.9	99.1	148.3	130.0	17.9	4.9
Iron and steel	45.4	27.5	53.6	67.9	66.0	102.5	84.4		
Nonferrous metals	41.8	20.2	20.1	24.7	20.2	19.3	16.9		
Textile yarn fabric	5.8	3.9	6.1	5.3	6.3	12.9	16.7		
Other	4.4	2.8	3.8	5.0	5.6	13.4	12.0		
Machinery and transport equipment (SITC 7)	26.9	28.6	33.4	32.1	38.3	47.9	58.0	8.0	13.7
Nonelectric machinery	14.6	18.3	19.2	18.0	21.0	30.3	40.9		
Electrical machinery	12.2	9.7	13.8	13.8	14.9	17.1	16.7		
Transport equipment	.1	.6	.4	.3	2.4	.5	.4		
Miscellaneous manufactured goods (SITC 8)	42.7	37.2	41.0	45.4	56.6	79.9	89.0	12.2	13.0
Clothing	36.7	32.3	35.4	37.7	44.2	58.9	62.3		
Furniture	1.6	1.5	1.8	3.2	5.4	7.9	11.1		
Other	4.4	3.4	3.8	4.5	7.0	13.0	15.6		
Other	3.7	4.0	5.5	5.0	6.7	7.7	6.5	.9	

Source: U.N. trade data, magnetic tapes.

TABLE A-11—LEADING BULGARIAN EXPORTS TO THE INDUSTRIALIZED WEST (IW)

[Dollar amounts in thousands of U.S. dollars]

SITC	Description	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
33	Petroleum and petroleum products	1	$120,133	17.0		$35,985	7.5		$13,940	3.5	
67	Iron and steel	2	102,503	14.5		65,953	13.7		67,938	17.0	
05	Fruit and vegetables	3	77,682	11.0		75,452	15.7		60,659	15.2	
04	Clothing	4	58,882	8.3		44,185	9.2		37,733	9.5	
12	Tobacco	5	58,324	8.2	58.0	46,658	9.7	55.7	45,590	11.4	56.7
71	Machinery, nonelectric	6	30,302	4.3		21,008	4.4		18,045	4.5	
51	Chemical elements and compounds	7	24,959	3.5		22,011	4.6		12,069	3.0	
01	Meat and meat preparation	8	22,533	3.2		10,360	3.8		16,180	4.1	
60	Nonferrous metals	9	19,505	2.8		10,179	4.2		24,749	6.2	
28	Metalliferous ores and scrap	10	19,223	2.7	75.5	4,346	.9	73.6	2,971	.7	75.2
	Top 50 total		699,917			474,928			396,762		
	Total exports to 17 IW		707,693			481,464			398,566		
	Top 50 as percent of total exports to 17 IW		98.9			98.6			99.5		
	5-DIGIT SITC AGGRAGRATES										
3324	Residual fuel oils	1	88,484	12.5		15,240	3.2		9,508	2.4	
1210	Tobacco, unmanufactured	2	58,322	8.2		46,650	9.7		45,585	11.4	
67231	Iron, steel ingots	3	47,567	6.7		25,480	5.3		23,381	5.9	
67271	Iron, steel coils	4	30,451	4.3		17,875	3.7		22,493	5.6	
3321	Gasoline	5	17,524	2.5	34.2	9,461	2.0	23.0	0	0	25.4
0545	Miscellaneous fresh vegetables	6	16,031	2.3		14,020	2.9		12,859	3.2	
04112	Women's outerwear, nonknit	7	15,916	2.2		13,217	2.7		10,297	2.6	
2020	Iron and steel scrap	8	14,472	2.0		1,861	.4		427	.1	
84144	Outerwear, knit, nonelastic	9	14,061	2.0		10,205	2.1		7,502	1.9	
0240	Cheese and curd	10	13,850	2.0	44.7	11,297	2.3	34.4	6,315	1.6	34.0
0113	Meat of swine, fresh, frozen	11	12,747	1.0		12,876	2.7		11,251	2.8	
7151	Machine tools for metal	12	12,330	1.7		8,959	1.9		7,728	1.9	
84113	Men's underwear, nonknit	13	10,783	1.5		7,204	1.5		7,380	1.9	
11212	Wine of fresh grapes	14	9,795	1.4		7,540	1.6		6,026	1.5	
0544	Fresh tomatoes	15	9,062	1.3	52.5	9,390	2.0	43.9	8,649	2.2	45.1
71932	Forklift trucks	16	8,829	1.2		5,913	1.2		5,024	1.3	
0552	Miscellaneous preserved vegetables	17	8,725	1.2		10,657	2.2		7,703	1.9	
84111	Men's outerwear, nonknit	18	8,535	1.2		4,150	.9		4,714	1.2	
0012	Sheep, lamb, goats	19	7,991	1.1		7,152	1.5		2,181	.5	
3323	Distillate fuels	20	6,845	1.0	50.3	5,771	1.2	60.9	168	0	50.0
7221	Electric power machinery	21	6,469	.9		5,998	1.2		4,705	1.2	
84201	Furskin clothing, products	22	5,992	0		8,811	1.4		8,714	1.4	
0112	Meat of sheep, goats, fresh, frozen	23	5,904	0		2,024	.4		733	.2	
67251	Blooms, billets, slabs of iron, steel	24	5,902	0		4,357	.9		2,236	0.6	
82109	Furniture and parts, n.e.s	25	5,308	0	62.4	3,004	.6	55.5	1,492	.4	53.8
	Top 50 total		539,261			344,697			202,633		
	Total exports to 17 IW		707,693			481,464			390,566		
	Top 50 as percent of total exports to 17 IW		76.2			71.6			70.9		

TABLE A-12.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM BULGARIA, 1974-79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total 1974-79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$358, 040	100.0	$324, 763	100.0	$383, 164	100.0	$398, 566	100.0	$481, 464	100.0	$707, 693	100.0	$2, 653, 690	100.0
Belgium-Luxembourg	8, 452	2.4	10, 934	3.4	14, 148	3.8	20, 491	5.1	19, 346	4.0	25, 188	3.6	98, 859	3.7
Denmark	6, 532	1.8	6, 233	1.9	9, 309	2.4	6, 529	1.6	8, 030	1.7	8, 019	1.1	44, 661	1.7
Federal Republic of Germany	90, 545	25.3	94, 072	29.0	113, 210	29.5	120, 688	30.3	157, 928	32.8	194, 578	27.5	771, 021	29.0
France	28, 489	8.0	36, 493	11.2	49, 926	13.0	43, 398	10.9	56, 445	11.7	68, 757	9.7	283, 507	10.7
Ireland	585	.2	287	.1	676	.2	375	.1	725	.2	1, 275	.2	3, 923	.1
Italy	96, 777	27.0	65, 406	20.1	68, 514	17.9	75, 635	19.0	82, 995	17.2	210, 562	29.8	599, 884	22.6
The Netherlands	7, 214	2.0	6, 406	2.0	8, 263	2.2	11, 747	2.9	16, 653	3.5	27, 040	3.8	77, 323	2.9
United Kingdom	31, 231	8.7	16, 254	5.0	20, 106	5.2	20, 700	5.2	28, 770	6.0	25, 696	3.6	142, 757	5.4
European Community, subtotal	269, 824	----------	236, 085	----------	284, 452	----------	299, 563	----------	370, 901	----------	561, 115	----------	2, 021, 940	76.2
Austria	30, 008	6.4	24, 689	7.6	27, 113	7.1	36, 118	9.1	36, 637	7.6	40, 201	5.7	194, 765	7.3
Canada	4, 240	1.2	3, 691	1.1	2, 166	.6	2, 009	.5	2, 855	.6	5, 382	0	20, 343	.8
Finland	4, 751	1.3	6, 360	2.0	5, 242	1.4	5, 255	1.3	6, 603	1.4	9, 792	1.4	38, 003	1.4
Japan	22, 136	6.2	13, 877	4.3	15, 229	4.0	16, 920	4.2	18, 212	3.0	24, 495	3.5	110, 869	4.2
Norway	2, 351	.7	2, 608	0	1, 752	.5	2, 016	.5	1, 036	.2	1, 874	.3	11, 717	.4
Sweden	7, 068	2.0	8, 042	2.5	9, 820	2.6	6, 360	1.6	10, 655	2.2	14, 189	2.0	56, 134	2.1
Switzerland	9, 263	2.6	9, 115	2.8	10, 435	2.7	12, 374	3.1	14, 264	3.0	13, 625	1.9	64, 076	2.6
United States	8, 399	2.3	20, 217	6.2	26, 955	7.0	17, 951	4.5	20, 301	4.2	37, 020	5.2	130, 843	4.9

Source: U.N. trade data, magnetic tapes.

TABLE A-13.—PROJECTED 1985 BULGARIAN TRADE WITH THE INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

	1980		Projected 1985		Projected average annual growth rate 1980–85 (percent)
	Amount	Percent of total	Amount	Percent of total	
Imports from industrialized West	$1,489.6	100.0	$2,290.0	100.0	9.0
Foodstuffs (SITC 0, 1, 4)	184.9	12.4	326.0	14.2	12.0
Crude materials (SITC 2)	50.6	3.7	110.0	4.8	15.0
Mineral fuels (SITC 3)	8.3	.6	11.1	.5	6.0
Chemicals (SITC 5)	260.3	17.5	373.0	16.3	7.5
Basic industrial goods (SITC 6)	448.2	30.0	572.0	25.0	5.0
Machinery and transport equipment (SITC 7)	443.1	11.6	666.0	29.1	8.5
Miscellaneous manufactured goods (SITC 8)	74.6	5.0	120.0	5.2	10.0
Other (SITC 9)	25.0	1.0	32.0	1.4	5.0
Exports to industrialized West	725.6	100.0	1,200.0	100.0	10.5
Foodstuffs (SITC 0, 1, 4)	167.5	23.1	295.2	24.6	12.0
Crude materials (SITC 2)	50.5	6.9	87.0	7.3	11.5
Mineral fuels (SITC 3)	163.5	22.6	264.0	22.0	10.0
Chemicals (SITC 5)	60.2	8.3	106.0	8.8	12.0
Basic industrial goods (SITC 6)	130.0	17.9	200.0	16.7	9.0
Machinery and transport equipment (SITC 7)	58.0	8.0	107.0	8.9	13.0
Miscellaneous manufactured goods (SITC 8)	89.0	12.3	164.0	13.7	13.0
Other (SITC 9)	.9	.1	1.4	.1	10.0
Trade turnover	2,215.2		3,490.0		
Balance	−764.0		−1,090.0		

TABLE A-14.—PROJECTED 1985 UNITED STATES-BULGARIAN TRADE

[Dollar amouts in millions of U.S. dollars]

	1979	1980	1981	Projected 1985 [1]	
				Low-range estimates	High-range estimates
U.S. exports	56.2	160.7	258.0	260.0	350.0
Foodstuffs (SITC 0, 1, 4)	31.2	126.0	191.0	170.0	220.0
Crude materials (SITC 2)	14.3	4.7	17.0	20.0	30.0
Mineral fuels (SITC 3)	(2)	(2)	0.0	(2)	(2)
Chemicals (SITC 5)	.9	12.2	36.5	50.0	60.0
Basic industrial goods (SITC 6)	.5	1.7	1.4	2.0	2.5
Machinery and transport equipment (SITC 7)	5.8	7.3	8.8	9.0	11.0
Miscellaneous manufactured goods (SITC 8)	3.4	8.7	3.5	10.0	25.0
Other (SITC 9)	.1	(2)	(2)	(2)	(2)
U.S. imports	34.7	24.9	34.1	52.0	86.0
Foodstuffs (SITC 0, 1, 4)	26.8	19.8	29.4	38.3	62.6
Crude materials (SITC 2)	1.0	(2)	(2)	2.0	2.3
Mineral fuels (SITC 3)	.0	(2)	.0	0.0	0.0
Chemicals (SITC 5)	1.4	.5	.9	2.2	2.7
Basic industrial goods (SITC 6)	.4	.5	.2	1.1	4.2
Machinery and transport equipment (SITC 7)	2.5	2.9	2.7	4.6	9.6
Miscellaneous manufactured goods (SITC 8)	2.6	2.1	.7	3.4	4.2
Other (SITC 9)	(2)	(2)	(2)	(2)	(2)
Trade turnover	90.9	185.0	292.1	312.0	436.0
Balance	+21.5	+135.8	+223.9	+208.0	+264.0

---

[1] Low-range estimates are based on the assumption that 1974-1979 trends will continue; U.S. exports of grains are not expected to continue to increase by the record amounts posted in 1980 and 1981, though allowances have been made in the forecast for substantially higher amounts of grains exports in 1985 than 1974-79 trends would warrant. High range estimates assume full normalization of trade and continued large scale grains exports. Import projections assume continued significant imports of Bulgarian tobacco.

[2] Negligible.

CHINA: PERFORMANCE AND PROSPECTS FOR TRADE WITH THE UNITED STATES AND THE WEST

By Damian T. Gullo

CONTENTS

Page
Summary 51
Introduction 53
I. Past Trade Objectives and Performance 55
II. Hard Currency Debt at Yearend 1980 58
III. Hard Currency Trade Objectives and Strategy, 1981–85 61
IV. Hard Currency Export Capabilities 64
V. Hard Currency Trade and Debt Outlook 68
VI. Prospects for U.S.-PRC Trade 69
VII. Projected 1985 U.S.-PRC Trade Under Alternative Scenarios 76

TABLES

1. China's Foreign Trade 56
2. China: Lines of Credits, 1978–80 59
3. Western Commercial Banks' Gross Claims on China 60
4. PRC Hard Currency Imports 62
5. PRC Hard Currency Exports 65
6. Projected 1985 PRC Hard Currency Trade 68
7. U.S. Exports to the PRC 70
8. U.S. Imports from the PRC 74
9. Projected 1985 U.S. Trade with China 77

SUMMARY

Since the announcement in 1978 of China's much publicized modernization drive, Beijing (and the West) have come to realize better the major economic problems facing the PRC. As a result, Beijing has been forced to shelve its overly ambitious Ten-Year Economic Plan (1976–85) in favor of a slower and more pragmatic approach. Many of the large investment projects in the original plan have been scaled-down or cancelled. The share of total investment going to agriculture and light industry has been increased at the expense of heavy industry; and 1985 production targets for key commodities such as oil, coal, and steel have been put off until at least 1990. The "readjustment" program, which was launched in 1979 and originally scheduled to last three years, also is aimed at correcting an over-commitment of resources to capital construction and eliminating sectoral imbalances, low productivity, and a weakened hard currency position.

Although Beijing has not yet unveiled the 1981–85 economic plan, it will likely call for the continuation of retrenchment policies. China presumably will concentrate on overcoming bottlenecks in the economy, improving living standards, spurring the expansion of export industries, and encouraging foreign investment in the PRC. In addition, capital construction is expected to be held down over the next several years. The modernization and expansion of existing facilities,

at least over the next several years, should continue to take precedence over whole-plant purchases. High priority probably also will be given to projects that require less hard currency, provide a quicker return on investment, and offer potentially greater export earnings.

As in the past, China over the next four years is expected to look to the West for machinery, semimanufactures, and grain. The retrenchment program along with cost-cutting measures, however, should dampen the rapid growth of imports—particularly purchases of Western equipment—registered since 1970. In addition, absorption problems and energy shortages are expected to help hold down machinery imports.

On the export side, the growth of China's sales to the West also is expected to slow in 1982–85, largely because of Beijing's efforts to improve living standards, shortfalls in oil production, and growing Western protectionism. Exports of manufactures, especially textiles and other light industry goods, should continue to be the driving force behind China's hard currency export growth.

Under high and low scenarios, projected Chinese exports to the West in 1985 range from $29 billion to $39 billion with projected PRC hard currency imports between $25 billion and $34 billion. (In 1981, China's imports from the West totalled an estimated $17.1 billion while exports reached an estimated $20.9 billion.)

As in the past, China presumably will try to keep its hard currency trade close to balance and minimize the use of foreign credits. Medium and long-term credit drawings over the next four years probably will be held to $12–$16 billion, which would result in a hard currency debt at yearend 1985 of $10–$13 billion. Beijing is expected to turn first to soft loans from international financial institutions and development assistance credits to help meet its financial needs.

China's trade with the U.S. in 1982–85 should continue to grow but at a substantially slower pace. The combination of hard currency shortages, the extension of the readjustment program, and the PRC's inability to absorb further substantial increases in imports should dampen China's demand for U.S. products. Agricultural products most likely will still dominate U.S. exports with semimanufactures—particularly inputs for China's light industry—probably registering healthy gains.

Meanwhile, Chinese exports to the U.S. will continue to be hindered by the limited range of goods the PRC has to offer. In addition to the restricted growth of China's textile exports to the U.S. as a result of the U.S.-PRC textile agreement, domestic sensitivity in other import sectors could restrain growth. Supply constraints, on the other hand, are expected to hold down PRC sales of fuels and other crude materials. Bilateral trade also could be affected by political considerations including the inability of the current Chinese leadership to successfully deal with China's serious economic problems or to meet rising consumer expectations. Such a failure could result in a shift toward the left and a possible retreat from the present policy of expanding commercial ties with the West.

Based on alternative scenarios, projected U.S. exports to the PRC in 1985 could range from $4.3 billion to $6.1 billion with projected import between $4.1 billion and $6.0 billion.

INTRODUCTION

The ideological conflict between the moderate and radical factions within the Chinese Communist Party, which can be traced back to the Cultural Revolution (1966–76), largely was responsible for China's uneven economic performance in the 1970s. The struggle put economic issues increasingly in ideological terms and sharply reduced Beijing's ability to deal with the country's economic problems—particularly during the early 1970s. The radicals supported strong economic nationalism, resistance to foreign influences, and reliance on domestic innovation for achieving China's economic development. The moderates, on the other hand, favored a more pragmatic approach. Recognizing that reliance solely on the country's limited technical resources would stretch out modernization indefinitely and confine China to the ranks of a second-class nation, the moderates supported massive imports of Western equipment and technology—including large-scale plants—to transform China into a modern industrial state as quickly as possible. They argued that once a technology base was established, a return to greater self-reliance would become a more practical possibility.

By the mid-1970s, the jockeying for political position became more blatant with the failing health of Mao Zedong and Zhou Enlai. At the same time, the seriousness of the economic situation became more apparent.

Deterioration was most evident in industry, which for more than a quarter century had been the major source of China's growth. Growing imbalances within the iron and steel sector resulted in steel shortages and the declining growth in coal production caused widespread disruptive energy shortfalls. Agriculture, which had been a drag on the economy, further suffered. Meanwhile, urban labor—after two decades of sacrifice—began to demand a higher priority for consumption at a time when investment needs also were great. (The share of output going to consumption had been severely limited since economic growth had been obtained by maintaining investment at 25 percent or more of GDP.)

In January 1975 at the Fourth National People's Congress, Zhou Enlai presented general guidelines for China's economic development over the next twenty-five years. Zhou's speech, which put pragmatism ahead of ideological beliefs, called for a dedicated drive toward achieving by the year 2000 "four modernizations"—of agriculture, industry, national defense, and science and technology.

The Fifth Five Year Plan (1976–80) was to have been the spring board for the modernization drive. However, implementation of the economic plan proved difficult because of renewed political turmoil, unfavorable weather conditions, and the Tangshan earthquake. In late 1975 and early 1976, the radicals stepped up their attacks on government bureaucrats and party cadre belonging to the modernization faction. The death of Zhou Enlai in January, 1976 and Mao Zedong's death later that year added to the turmoil.

The quick arrest of the radical leaders—the so-called Gang of Four—by the new moderate government under Huo Guofeng, one month after Mao's death, however, set the stage for a pragmatic look at the political and economic problems facing the country. The arrests greatly reduced the ideological content of Chinese politics and removed the primary source of disorder that plagued China for the past decade.

In March 1978, China unveiled an ambitious ten-year economic plan (1976–85) that incorporated the ill-fated 1976–80 five-year plan and marked a sharp departure from Beijing's past commercial dealings with the West. Because of the plan's heavy reliance on imports—particularly Western technology and equipment—China dropped ideological constraints regarding the use of foreign credits and began actively seeking joint ventures with the West, including equity arrangements. The new plan also gave more prominence to developing agriculture and light industry than in the past but still continued to favor heavy industrial growth; agriculture and light industry in 1978 accounted for only 11 percent and 5 percent, respectively, of state budget financed investment spending, compared with 55 percent for heavy industry.

One-hundred and twenty large-scale projects, heavily depended on imports of Western machinery and technology, were scheduled to be completed or at least underway by 1985. The ventures include 10 iron and steel complexes, 9 nonferrous metal complexes, 8 coal mines, 10 oil and gas fields, 30 power stations, 6 new trunk railways, and 5 key harbors. In addition, the 10 year plan set unrealistic 1985 production targets for key commodities such as oil, coal, and steel.

Sectorial imbalances, low productivity, and a poor hard currency position, however, forced Beijing in 1979 to shelve the 1976–85 plan in favor of an economic "readjustment" program that was scheduled to run through 1981. As a first step toward solving the country's problems, economic priorities were reordered and investment for agriculture and light industry was increased at the expense of heavy industry. The lagging sectors that had constrained China's economic growth—energy, transport, and building materials industries—still were to receive high priority, however. Beijing also scaled down, postponed, or cancelled a number of the 120 major projects contained in the 1976–85 plan. In addition, the 1985 production targets for several key commodities—oil, coal, and steel—were put off for at least another five years. Emphasis was put on improving existing facilities rather than on importing whole plants. At the same time, Beijing took steps toward economic reform by giving state enterprises and local governments greater authority for decision-making and implementing incentive measures.

The retrenchment period now is expected to last until the mid-1980s since China apparently has fallen behind in achieving even the relatively modest goals called for by the original 3-year economic "readjustment" program. The program has been hampered by the reluctance of the Chinese bureaucracy to adopt the new policies, shortfalls in the 1980 harvest, and stagnant oil, coal, and electrical power output. In addition, newly instituted economic reform measures have brought new problems while failing to come to grips with some old ones. The central government's task of controlling an already overcommitted capital construction sector, for example, has been made more difficult by the decentralization of economic authority. Over spending on construction coupled with rising wages resulted in state budget deficits the past three years. The imbalance in 1979 reached a record $11.4 billion and the 1980 deficit totalled more than $7 billion—substantially higher than originally anticipated. As a result, China was forced into another round of cost cutting that affected both existing and new projects involving foreign firms. Japanese companies were hardest hit because of Beijing's decision to postpone the second stage of the $5 billion Baoshan steel complex and four large petrochemical complexes. The cutbacks also affected several ventures that involved U.S. firms, including a trade center in Beijing, a large copper complex, an aluminum processing plant, and an iron ore project.

Because of the substantial compensation payments the PRC owed Japan as a result of the cancelled contracts, however, China reversed its earlier decision and continued to import most of the equipment. Beijing also revived the Daqing petrochemical project and decided to complete the first phase of the Baoshan steel mill after obtaining a new soft loan package from Japan. The $1.3 billion package consists of $570 million in commodity credits to finance local construction costs, $440 million in Japanese Exim funds, and $300 million in commercial loans.

In addition to economic factors, the direction and pace of China's readjustment program—and ultimately its modernization drive—will depend on political and bureaucratic considerations. Although Beijing now has a much clearer idea of the country's economic problems, the present leadership apparently is still trying to consolidate its hold on power and continues to grapple with details of policy implementation. The slowness of China's bureaucracy in adopting the new policies, aggravated by foot-dragging and opposition have contributed to the extension of the readjustment period.

I. PAST TRADE OBJECTIVES AND PERFORMANCE

Following a decade in which China's trade with the West stagnated around $2.8 billion annually, Beijing in the early 1970s adopted a more outward looking economic policy in order to spur modernization. (See Table 1 for a breakdown of China's foreign trade by areas.) As a result of expanded commercial ties. China's trade with the West sharply increased and in 1980 reached $33.1 billion—nearly ten times greater than the 1970 level. The PRC during the 1970s looked to the West for metals—mainly steel—machinery and equipment, and advanced technology to support the growth and development of its industrial sector. China also relied heavily on imports of Western agricultural commodities such as grain, cotton, and sugar to help feed and cloth its huge population. More recently, the government has given high priority to imports that will be used in domestic projects designed to generate additional export earnings. In addition, Beijing has increased its purchases of consumer goods in an effort to improve living standards. On the export side, sales to the West represent China's main source of hard currency needed to finance imports. Exports over the past decade have covered a wide range of goods from foodstuffs to manufactures.

The fluctuations in China's trade with the West during the 1970s—particularly on the import side—largely reflects the political turmoil and Beijing's erratic economic policies. In an effort to get China's economy back on track, Beijing after the Cultural Revolution stepped up imports of Western goods. Purchases included complete plants for the petrochemical and steel industries, a variety of industrial

TABLE 1.—CHINA'S FOREIGN TRADE

[Millions of U.S. dollars]

	1970	1975	1976	1977	1978	1979	1980
Total exports (f.o.b.)	2,150	7,120	7,275	8,108	10,170	13,773	19,492
West	1,680	5,755	6,050	6,754	8,524	12,018	17,533
Developed	660	2,610	2,695	2,939	3,776	5,643	8,264
Less developed	1,020	3,145	3,350	3,815	4,748	6,375	9,270
Communist	480	1,371	1,225	1,354	1,647	1,755	1,959
Eastern Europe	255	625	540	706	982	1,096	1,332
U.S.S.R	20	150	180	178	257	241	230
Other	205	590	505	470	408	418	397
Total imports (f.o.b.)	2,045	6,830	5,580	6,598	10,351	14,383	19,316
West	1,655	5,825	4,500	5,531	8,782	12,440	17,355
Developed	1,370	4,985	3,770	4,166	7,268	10,168	13,509
Less developed	285	840	730	1,365	1,515	2,272	3,846
Communist	390	1,005	1,080	1,067	1,568	1,943	1,961
Eastern Europe	225	595	610	649	968	1,239	1,284
U.S.S.R	25	130	240	162	242	268	294
Other	140	280	230	256	358	435	383
Trade balance	105	290	1,695	1,510	−180	−610	177
West	25	−70	1,550	1,223	−259	−423	178
Developed	−170	−2,375	−1,075	−1,227	−3,492	−4,525	−5,245
Less developed	735	2,305	2,620	2,450	3,233	4,103	5,424
Communist	90	365	145	287	78	−188	−2
Eastern Europe	30	30	−70	57	14	−143	48
U.S.S.R	−5	20	−60	16	15	−27	−64
Other	65	310	275	214	49	−17	14

Source: Central Intelligence Agency's quarterly trade reports on China and the CIA's "Handbook of Economic Statistics."

machinery, aircraft, ships, steel, aluminium, and fertilizer. In 1975, however, imports were trimmed as a reaction to a larger than anticipated trade deficit in 1974 that was caused by sky-rocketing import prices, softening demand for Chinese exports, and the need for additional quantities of imported grain and cotton. Imports in 1976 sharply fell as the political turmoil reached a climax with the deaths of Mao and Zhou Enlai; the lack of agreement within the leadership on the new five-year plan and the debate over trade policy held down purchases by the state trading corporations. With the adoption of the overly ambitious ten year economic plan in 1978, hard currency imports that year increased by nearly 60 percent.

Although the level of purchases from the West have continued to increase, the rate of growth has tapered off as a result of the slashing of economic targets and launching of the "readjustment" program. China's import policies came under sharp scrutiny in early 1979 along with the overall economic goals associated with the 1976–85 plan. Importers apparently had been rushing to purchase foreign technology with little thought given to potential costs, availability of necessary domestic inputs, or future demand for the goods to be produced. As a result, Beijing called an immediate halt to ongoing negotiations for Western equipment valued at $40 billion and refused to give final approval to $2.6 billion worth of whole-plant contracts that were signed in December 1978. Although all but one of the initialed contracts were eventually approved, the suspension put a damper on Western euphoria concerning the China market. PRC hard currency imports reached a record $17.4 billion in 1980 and then declined by $300 million in 1981.[1]

---

[1] In comparison, Taiwan in 1980 imported $19.7 billion worth of merchandise goods; Singapore, $24.0 billion; and South Korea, $22.3 billion.

The political struggle apparently had less of an effect on China's exports. After increasing at a strong clip in the early 1970s, the growth of exports to the West sharply fell in 1975 and registered little gain in 1976. Nevertheless, the level of hard currency exports continued to increase during this tumultuous period. The export pace picked up in 1977; deliveries to the West over the past 4 years have risen by 32 percent. In 1981, PRC exports to the West reached a record $20.9 billion.

Prior to the formal launching of China's modernization drive in 1978, U.S. trade with China was characterized by erratic U.S. exports and slow but steady growth in U.S. imports. During the 1972–77 period, Beijing apparently treated the U.S. as a residual supplier of basic commodities—grain, cotton, soybeans, and aluminum—buying from the U.S. only to cover pressing short-term needs. Purchases of U.S. technology, meanwhile, generally were confined to areas where the United States offered unique or clearly superior products. However, Beijing now views the U.S. as a counterweight to growing Soviet influence in Asia and as an important source of agricultural and high technology items.

Commercial transactions between the two countries resumed in the early 1970s for the first time in two decades with the lifting of the U.S. trade embargo. (Import restrictions were removed in 1971 while export restrictions were lifted in 1972.) The removal of restrictions came at an opportune time for Beijing since China in 1973–74 needed grain, cotton, and soybeans and the U.S. was the best available source. As a result, U.S. exports to the PRC sharply rose and reached $807 million in 1974. The delivery of 10 Boeing aircraft also helped to push up exports during this period. In 1975, however, Chinese purchases of U.S. goods were slashed by nearly two-thirds as China turned to other suppliers for agricultural commodities. U.S. exports suffered a further cut in 1976 and registered only a small increase in 1977.

Because of renewed Chinese purchases of substantial amounts of U.S. grain and cotton, U.S. exports to China in 1978 jumped fourfold to $818 million. (These purchases were made at a time when other suppliers could have filled at least part of China's order.) The sharp rise reflected government efforts under China's modernization program to improve living standards and boost hard ccurrency exports of textiles. An increase in sales of manufactures—particularly steel pipe and oil and gas equipment—also contributed to the sudden surge in U.S. exports. Meanwhile, the pace of U.S. imports quickened because of sharp increases in U.S. purchases of manufactures— particularly cotton fabrics.

Aided by the diplomatic recognition of the People's Republic of China on January 1, 1979, and the signing of several major bilateral agreements, U.S. trade with the PRC flourished in 1979 and 1980. (U.S. exports in 1980 reached a record $3.7 billion while U.S. imports totalled $1.1 billion. In 1981, U.S. exports declined slightly to $3.6 billion while U.S. imports rose sharply to $1.9 billion.) The Claims and Assets Agreements, which was signed in May 1979, opened the door to direct shipping and banking relations between the two countries. The Sino-U.S. trade agreement, which also was concluded in May 1979 and approved by Congress in early 1980, gave a further boost to bilateral trade. Besides calling for strengthened economic ties, the accord granted each country most-favored-nation status (MFN). While having little effect on PRC imports, Chinese exports to the U.S. have benefited substantially from the reduced tariff rates.

In April 1980, the U.S. Eximbank was given the go-ahead to finance trade with China. Beijing so far has received two Exim loans totalling $57 million. The credits, which were granted in September 1981, are for the purchase of energy-related equipment and technology. In September 1980, a bilateral 3-year textile agreement that replaced lower unilateral quotas was signed. Civil air, maritime, and consular agreements also were signed in September. More recently, the U.S. and China have signed an accord allowing the Overseas Private Investment Corporation (OPIC) to ensure U.S. business investments in China. The two countries also have signed a 4-year grain trade accord that calls for Chinese annual purchases of at least 6 million tons of U.S. wheat and corn through 1984.

The role of communist countries in China's trade during the 1970s diminished as the PRC turned increasingly toward the West for help in feeding its huge population and modernizing its industrial and agricultural sectors. As a share of total turnover, China's trade with communist countries fell to 10 percent in 1980 from 21 percent in 1970. This trade in 1980 totalled $3.9 billion and, as was the case for most of the 1970s, was virtually in balance. Eastern Europe accounted for two-thirds of the 1980 total and the U.S.S.R. about 12 percent. Romania remained China's leading communist trading partner with bilateral trade in 1980 totalling $1.1 billion. Petroleum and petroleum products have accounted for an increasing share of PRC exports. China in 1980 shipped to Romania roughly 20,000 b/d of oil. (China also exports oil to North Korea and prior to 1979 shipped petroleum to Vietnam. Because of Vietnam's military involvement in Kampuchea, Beijing severed relations with Hanoi in 1978.) Meanwhile, Romania's exports to the PRC largely consist of machinery and transport equipment. Fertilizers, rolled steel and tubes, and chemicals account for the remainder. In early years, Romania was the leading supplier of oil rigs to China.

In regard to PRC trade with the U.S.S.R., deliveries of fresh fruit and clothing were responsible for roughly one-half of China's exports in 1980 while Soviet trucks and aircraft and aircraft parts accounted about three-fourths of PRC imports.

II. HARD CURRENCY DEBT AT YEAREND 1980

Despite the availability of extensive foreign credits, Beijing has opted to hold down its foreign debt. The PRC drew down only about $2.9–$2.5 billion of the $29 billion in credits it has lined up in 1978–80.[2] China's traditional aversion toward indebtedness and the shift away from the importation of complete plants during the readjustment period largely are responsible for Beijing's cautious use of foreign credits. At yearend 1980, China's gross hard currency debt was only an estimated $3.5–$4.5 billion—roughly one-fourth of hard currency exports and easily manageable. The debt figure includes Euro-, officially-backed, and development assistance credits; a share of the $280 million reserve tranche China received from the IMF in November 1980; deferred payments on whole-plant contracts that were signed in the mid-1970s; and credits stemming from compensation trade with foreign firms.

---

[2] Some of the Eurodollar credits extended to China since 1978 reportedly have expired and are no longer available. In addition, the PRC also has cancelled some of its Eurodollar lines.

Beijing has expressed a clear preference for government-backed credits and, more recently, loans from international financial institutions because of their lower interest rates and longer repayment period. Of the $29 billion in credits obtained in 1978–80, medium- and long-term officially-backed credits accounted for about two-thirds with nearly all of the remainder coming from commercial banks at interest rates usually reserved for only the best customers—a 0.5 percentage point margin over the London Interbank Official Rate (LIBOR). (Table 2 contains a breakdown of China's major lines of Western

TABLE 2.—CHINA: LINES OF CREDIT, 1978–80

	Amount of (millions U.S. dollars)	Terms	Date signed
MAJOR COMMERCIAL CREDITS			
Country of lead bank:			
United Kingdom	675	0.5 percent over LIBOR, 5 yr repayment.	April 1979.
Japan	2,000	0.5 percent over LIBOR, repayment after 4½ yr.	May 1979.
Do	6,000	0.25 percent over LIBOR, 6-mo revolving credit.	Do.
Canada	250	0.5 percent over LIBOR, repayment after 4½ yr.	1979.
West Germany	300	0.5 percent over LIBOR	1979.
United States	95	Probably 0.5 percent over LIBOR, repayment after 3 yr.	December 1979.
France	300	0.5 percent over LIBOR, repayment after 3 yr.	February 1980.
Total	9,620		
OFFICIALLY-BACKED CREDITS			
Lending country:			
United Kingdom	1,200	7.25 percent	December 1978.
Do	5,000	7.2 to 7.5 percent	March 1979.
Australia	55	Not available	April 1979.
Japan	1,800	6.25 percent, up to 15 yr repayment.	May 1979.
France	7,300	7.25 percent to 7.5 percent, repayment after 5 plus years.	Do.
Italy	1,000	7.75 percent, repayment after 8½ yr.	Do.
Canada	1,720	7.25 percent to 7.5 percent, repayment after 5 yr.	Do.
Belgium	167	7.25 to 7.5 percent, repayment after 5 to 8 yr.	December 1979.
Norway	100	7.25 to 7.5 percent	January 1980.
Argentina	300	7.5 percent, up to 10 yr repayment	June 1980.
Total	18,642		
DEVELOPMENT ASSISTANCE CREDITS			
Lending country:			
Japan	210	3 to 3.25 percent, 10 yr grace period followed by 30 yr repayment period.	April 1980 (agreement reached in December 1979).
Japan	260	do	October 1980.
Belgium	10	No interest, 10 yr grace period followed by 30 yr repayment period.	April 1980.
United Nations	30	Not available	Allocation for one-half of total made in February 1980.
Total	510		
INTERNATIONAL FINANCIAL INSTITUTION CREDITS			
Lender: International Monetary Fund.	[1] 280	Reserve tranche	November 1980.
Total	280		

[1] SDR 218,100,000.

credits for 1978–80 by country.) The PRC also has received about $510 million in development assistance loans—project tied credits—at interest rates ranging from 0 to 3 percent. In November 1980, China received a $280 million reserve tranche from the International Monetary Fund (IMF).

Data from the Bank for International Settlement (BIS) show that in the last half of 1980 Western commercial banks' gross claims on China rose after having declined steadily since June 1979. At the end of 1980 Western claims stood at $2.6 billion compared with $3.1 billion at mid-year 1979 (see Table 3). China apparently tapped Western credit lines to help shore up its weakening balance-of-payments position; the PRC suffered a $300 million hard currency trade deficit the fourth quarter of 1980. The PRC also drew down reserves to help meet its financial needs. According to IMF data, Chinese foreign exchange reserves in the fourth quarter fell by $1.6 billion and at the end of December 1980 totalled $2.3 billion.

The U.S. has played a very minor role in China's foreign credit picture because Beijing believes U.S. interest rates are too high. Of the $10 billion in commercial credit the PRC lined up in 1978–80, U.S. banks supplied substantially less than $1 billion. (According to IMF data, U.S. claims on China at the end of 1980 totalled $242 million.) The largest U.S. commercial loan probably is a Bank of America deutsche mark credit worth $93 million for the purchase of German power-generating equipment. The U.S. Eximbank in 1980 made a preliminary commitment to finance $80 million in Chinese purchases of U.S. equipment to be used in the second phase of the Baoshan steel complex. The PRC, however, did not request a conversion to permanent financing; the preliminary commitment expired in December 1980. (Baoshan's second phase was a victim of the recent round of project postponements and cancellations.) The PRC in 1981 was granted two loans totalling roughly $57 million to help finance Chinese purchases of U.S. energy-related machinery and technology. Beijing continually has argued that interest rates on Exim loans are not competitive with rates offered by Western Europe or Japan. Similarly, China so far has not requested CCC credits because of high interest rates.

Prior to the announcement of its modernization drive in 1978, Beijing had taken a hard line on foreign borrowing. In addition, the PRC had claimed it was "debt free". Although opposed to the use of commercial and government-backed credits for general purchases, China did use supplier credits to purchase Western equipment and agricul-

TABLE 3.—WESTERN COMMERCIAL BANKS' GROSS CLAIMS ON CHINA

[In millions of U.S. dollars]

End	Maturity structure			
	Total	1 yr or less	More than 1 yr	Unallocated
December 1977	455	390	62	3
June 1978	891	647	46	198
December 1978	992	780	31	181
June 1979	3,141	2,695	296	150
December 1979	2,456	1,292	998	166
June 1980	2,178	691	1,181	306
December 1980	2,627	924	1,427	276
June 1981	2.545	739	1.523	283

Source: Bank for International Settlement (BIS).

tural commodities. Interest charges that were included in the PRC's payments were considered by Beijing to be only part of any normal commercial transaction and as such did not represent a debt obligation. This also was the case when contracts explicitly listed interest charges or when Western suppliers obtained credits to finance the sale from commercial and government sources. Similarly, the PRC did not consider as debt its use of funds that were deposited in the Bank of China by Western banks; the West, on the other hand, viewed China's use of these funds as short term liabilities.

III. HARD CURRENCY TRADE OBJECTIVE AND STRATEGY 1981–85

China's Sixth Five-Year Plan (1981–85), which has not yet been announced, is expected to incorporate the readjustment program begun in 1979. Beijing presumably will continue to concentrate on overcoming severe bottlenecks in the economy, spurring the expansion of export industries, and improving living standards. Agriculture and light industry should still be favored over heavy industry. Capital construction is expected to be held down over the next several years as Beijing tries to bring the state budget back into balance: the 1981 budget called for a 40 percent cut in construction. (The 1981 budget deficit was an estimated $1.6 billion and capital construction was down by about 30 percent.) As a result, the improvement and expansion of existing facilities should continue to take precedence over purchases of complete plants. Economic reforms, meanwhile, are expected to continue at a cautious pace.

Readjustment efforts should continue to be hampered by inadequate infrastructure, shortages of raw materials, and growing energy shortfalls. According to Beijing, oil and coal production are expected to decline over the next several years. China also will be faced with rising unemployment stemming, in part, from the cutbacks in construction and the closing of inefficient factories. In addition, Beijing may have to cope with higher inflation that threatens to eat away at some of the gains recently made because of wage increases. The official Chinese estimate puts inflation for 1980 at 7.5 percent but the actual increase probably was substantially higher since the money supply grew considerably faster than the supply of consumer goods.

As in the past, China in 1982–85 is expected to look to the West mainly for specific kinds of machinery, raw materials, and grain. The retrenchment program along with cost-cutting measures, should dampen the rapid growth of imports—particularly purchases of Western equipment—registered since 1976. Absorption problems also are expected to contribute to the slower pace of machinery imports. The PRC already has experienced difficulties digesting Western machinery bought during the 1978 buying spree: about $2 billion worth of this equipment reportedly has been placed in storage.

Financial constraints on imports during the 1982–85 period most likely would stem from the level of export earnings and Chinese financial conservatism rather than from any lack of available credits. Although China in the past several years has demonstrated a willingness to finance purchases of Western goods with foreign credits, export earnings still are the most important factor in Beijing's assessment of what it thinks it can afford to buy.

The following is an assessment of China's imports from 1982–85.

Foodstuffs—Barring unforeseen circumstances, Chinese imports of Western foodstuffs—over four-fifths of which is grain—are expected to increase but at a substantially slower pace than 53 percent average annual rate registered in 1977–80 (see Table 4). New livestock programs and the retention of a growing share of grain in the rural areas should continue to exert pressure on Beijing to boost grain purchases. (China imported 13–14 million metric tons of grain from the West in 1980.) However, tighter world supplies and projected higher prices, should temper China's demand for Western grain. As in the past, imports of wheat as expected to exceed corn purchases by a 3 to 1 margin; wheat and corn accounted for nearly all of China's grain imports.

China already has long-term agreements with several Western countries for the delivery of 12–17 million tons of grain annually over the next several years. In addition to the grain agreement with the U.S. that guarantees 6–9 million tons annually through 1984. China has accords with Canada for 2.8–3.5 million tons through July 1982; with Australia for 1.5–2.5 million tons annually through 1984; with Argentina for 1–1.5 million tons annually over the next four years; and with France for 0.5–0.7 million tons annually through 1983.

Sugar imports from the West are expected to halt their recent decline and may begin to increase in the early 1980s if world sugar

TABLE 4.—PEOPLE'S REPUBLIC OF CHINA HARD CURRENCY IMPORTS

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	[2] 1980	Average annual rate of growth 1975–80 (percent)
Total	6, 410	6, 385	4, 505	5, 531	8, 770	12, 540	17, 355	18
Foodstuffs	1, 275	785	470	935	1, 205	1, 665	2, 600	13
Of which:								
Grain	1, 180	670	325	655	965	1, 430		
Sugar	(1)	65	115	245	155	105		
Crude materials	1, 315	845	695	1, 210	1, 600	2, 155	3, 875	20
Of which:								
Oilseeds	150	15	5	115	35	115		
Crude rubber, natural	(1)	135	135	180	175	195		
Textile fibers, natural	(1)	260	190	360	695	995		
Textile fibers, natural	(1)	260	190	360	695	995		
Textile fibers. synthetic	(1)	95	115	140	170	150		
Metal ores and scraps	(1)	(1)	(1)	55	110	115		
Petroleum and products		105	45	40	55	40		
Chemical		525	760	490	740	960	1, 700	22
Of which:								
Elements and compounds	(1)	(1)	205	270	350	380		
Fertilizers, manufactured	165	365	135	255	345	440		
Plastic materials	(1)	(1)	(1)	90	130	150		
Manufactures	3, 255	3, 960	3, 255	2, 630	4, 960	7, 430	9, 010	18
Of which:								
Textile yarn and fabric	170	85	125	155	190	280		
Iron and steel	1, 240	1, 435	1, 345	1, 370	2, 735	3, 140		
Nonferrous metals	395	430	240	220	365	435		
Nonelectric machinery	1, 240	900	905	250	580	1, 695		
Electric machinery		180	185	60	160	465		
Transport		630	205	355	455	710		
Precision instruments		40	45	35	65	130		
Other	40	35	25	30	40	105	170	27

[1] Not available.

[2] Estimate.

Source: Central Intelligence Agency.

prices continue to rise. Over the past several years, China has turned more to the West for sugar and away from Cuba—its traditional major supplier. The PRC recently signed a three year agreement with Australia for the delivery of 250,000 tons of sugar annually beginning in 1981; Australia and France are China's leading Western suppliers. Beijing reportedly also has agreed to import one million tons of sugar over the next seven years from the Philippines.

Crude materials.—Largely because of the importance placed on boosting textile output by the readjustment program, PRC imports of crude materials from the West in 1982–85 are expected to continue increasing at a strong but somewhat slower pace. Imports of textile fibers, which now account for over half of the PRC's crude material imports for the West, have soared because China's cotton production has failed to keep pace with sharply rising demand; cotton accounts for the bulk of natural fiber imports with the remainder mainly wool. By a wide margin, the U.S. over the past three years has ranked as China's leading supplier of cotton.

Chinese imports of synthetic fibers also probably will increase in the 1980s because of Beijing's efforts to boost textile production and rising world cotton prices. In addition, expected shortfalls in oil output could hold down domestic production of synthetic fibers despite China's purchases of a substantial number of Western chemical fiber plants over the past ten years. Future production also should be limited by the recent postponement of several major petrochemical projects. The U.S. and Japan have been China's chief sources of synthetic fibers.

Soybean imports are expected to continue climbing in 1982–85 largely because of rising domestic demand. Import growth, however, should be constrained by China's limited processing capability. Because of inadequate transportation, China has favored an inefficient system consisting of small, locally-controlled processing facilities. The U.S. since 1978 has supplied virtually all of China's soybean imports.

Chemicals.—Because of the high priority put on agriculture and light industry by the readjustment program, China's hard currency chemical imports should continue their recent upward trend. China's fertilizer output, which has risen sharply over the past several years, is expected to achieve only a marginal increase in the 1980s unless new capacity is added. The one-half billion dollars worth of fertilizer plants, which were purchased from Japan, the U.S., France, and the Netherlands in the mid-1970s, now are operational at close to full capacity. Consequently, any substantial boost in fertilizer inputs to China's agricultural sector in the early 1980s must come from imports. Japan and the EC have been the PRC's leading Western source of manufactured fertilizers, which account for roughly one-third of China's total chemical imports from the West.

China's drive to boost textile output should insure the continued increase of plastic material imports in the 1982–85 period. Synthetic resins, which are used in production of synthetic fibers, account for a large share of these imports. Japan, the EC, and the U.S. have been China's major suppliers of plastic materials.

PRC imports of chemical elements, on the other hand, are expected to level off over the next five years. These imports account for about one-third of China's total chemical purchases from the West. The slower growth should stem in part from the weakened demand for inputs that go into the manufacturing of fertilizer as the industry nears full capacity. Japan has been China's leading supplier with the U.S. a distant second.

Manufactures.—Reflecting the lower priority given to heavy industry during the retrenchment period and the sharp reduction in whole-plant purchases, the growth of hard currency manufactures imports—particularly steel and machinery—should slacken substantially in the early 1980s. The winding down of deliveries of Western machinery and equipment contracted for during China's 1978 buying spree also is expected to contribute to the slower pace. Iron and steel purchases, meanwhile, were slashed in 1980 and are expected to remain depressed at least over the next several years as Beijing tries to hold down capital construction. In 1976–79, iron and steel imports accounted for between 40 percent and 55 percent of PRC manufactured imports from the West. In 1980, however, they comprised only one-fourth of manufactured imports.

China will need substantial amounts of Western equipment and technology when it begins to develop its offshore oil. Western equipment also will be required to carry out plans for boosting oil output from its onshore fields and expanding existing coal mines. In addition, Beijing is actively seeking Western help for several massive hydroelectric projects. Chinese imports of Western mining and construction equipment have risen sharply since 1976 and totalled an estimated $300 million in 1980. The European Community, Japan, and the U.S. have been the chief suppliers of this type of equipment. (Data on imports of Western oil equipment is unavailable since UN trade data does not specifically break out this equipment.)

Meanwhile, Beijing is expected to continue efforts to overcome transportation bottlenecks and expand the size of China's merchant and fishing fleets. Transport equipment accounted for roughly one-quarter of China's imports of Western machinery in 1979. Imports of motor vehicles—largely trucks-increased by more than five-fold in 1976–79 while the value of Western ships and boats deliveries registered a similar sharp rise; vehicles and vessels account for virtually all of China's transport purchases. Over the past three years, the PRC has succeeded in doubling the size of its fleet to more than 10 million DWT and is expected to double it again by the end of the decade. Japan and the EC have been China's major supplier of transport equipment.

Imports of textile yarn and fabric and nonferrous metals should rise in 1982–85 but at a slower rate. The demand for Western textile yarn and fabric is expected to soften as China boosts textile production during the retrenchment period. Meanwhile, the shift away from heavy industry should dampen demand for nonferrous metal imports. Japan traditionally has been PRC's chief source of textile yarn and fabric while Canada, Australia, and the EC have accounted for the bulk of China's nonferrous metal imports.

IV. HARD CURRENCY EXPORT CAPABILITIES

The growth of China's hard currency exports is expected to slow in 1982–85 largely because of Beijing's effort to improve living standards, shortfalls in oil production, and growing Western protectionism.

However, sales stemming from China's compensation trade agreements with Western firms should help bolster Chinese hard currency exports over the next four years. Under compensation agreements, the Western partners are obligated to buy at least a portion of the finished output from these ventures.[3]

During the first half of the 1980s, the sale of manufactures—particularly textiles and other light industry goods—are expected to continue to be the driving force behind China's hard currency export growth; many of the PRC's compensation agreements involve the production of these goods. In the mid-1980s, foodstuffs could become a more important foreign exchange earner because of Beijing's new agricultural policies aimed at achieving greater efficiency and productivity.

The following is an assessment of China's export capabilities by major commodity categories for 1982–85.

Foodstuffs.—Because of increasing domestic demand, it is unlikely that the growth of foodstuff exports will rise much above the 1977–79 average annual rate of 13 percent—at least in the early 1980s (see Table 5). These exports have steadily declined as a share of total PRC sales to the West and in 1980 accounted for one-sixth of China's hard currency exports. Although the readjustment program calls for in-

TABLE 5.—PEOPLE'S REPUBLIC OF CHINA HARD CURRENCY EXPORTS

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	[2] 1980	Average annual rate of growth 975-80 (percent)
Total	5, 230	5, 800	6, 025	6, 754	8, 510	12, 020	17, 533	10
Foodstuffs	1, 715	1, 740	1, 650	1, 655	2, 005	2, 355	3, 100	13
Of which:								
Animals, meat, and fish	505	570	640	575	740	855		
Grains	570	520	270	240	260	250		
Fruits and vegetables	265	295	350	430	520	645		
Teas and spices	(1)	90	130	165	205	325		
Crude materials	1, 140	1, 585	1, 495	1, 715	2, 175	3, 440	5, 300	29
Of which:								
Oilseeds	125	135	80	70	80	170		
Textile fibers	150	210	255	280	375	490		
Crude animal materials	160	195	240	295	330	385		
Coal	(1)	15	75	20	40	85		
Petroleum	450	815	705	855	1, 075	1, 890		
Chemicals	345	255	290	350	410	720	1, 200	23
Manufactures	2, 020	1, 285	2, 535	2, 990	3, 880	5, 450	7, 850	25
Of which:								
Textile yarn, fabrics, and rugs	690	840	930	1, 010	1, 415	1, 910		
Clothing	260	250	340	495	595	1, 000		
Footwear	(1)	30	40	60	90	135		
Iron and steel	150	60	80	63	130	185		
Nonferrous metals	65	90	55	35	75	80		
Nonmetallic mineral products	(1)	130	150	180	250	300		
Metal products, industrial	(1)	95	100	180	200	305		
Handicrafts and light manufacturing	(1)	155	295	345	375	530		
Other	10	35	55	20	40	55	83	42

[1] Not available.
[2] Estimate.

Source: Central Intelligence Agency.

---

[3] Chinese compensation trade agreements generally call for the Western firm to supply the capital, technical assistance, and, in some cases, the raw materials or components at no charge while China provides the factories and labor. The Western partner then buys the finished good at a discount, which allows it to cover the cost of supplying the technology and components.

creased investment in agriculture, the immediate focus is on import substitution and boosting domestic consumption. Prospects are good, however, for substantial increases in exports of foodstuffs—particularly prepared fish and meat and tea—in the mid-1980s.

China recently launched a major program to modernize and expand its fishing fleet and processing capacity. In addition to expanding its own ship construction program, the PRC has made substantial purchases of foreign vessels and fishing equipment over the past few years. Beijing also signed several compensation trade agreements with Japanese companies that involve the purchase of Japanese fishing technology and equipment in exchange for the sale of Chinese marine products. China's hard currency fish exports, which reached $350 million in 1979, have accounted for a growing share of total foodstuff exports. The sale of higher quality fish largely has been responsible for the recent increase in the value of exports. Although China's Asian neighbors such as Hong Kong and Japan traditionally have been the PRC's chief customers, Western Europe and the U.S. offer potentially large markets.

The readjustment program's emphasis on boosting livestock production—particularly hogs and chicken—coupled with planned improvements in meat preparation, storage, and transport should help generate additional exports in the mid-1980s. The easing of restrictions in private ownership of livestock also is expected to contribute to higher output. Meanwhile, China's hard currency sales of tea and spices should continue at a strong pace. These exports have grown at an average annual rate of 37 percent in 1975–79. At the expense of more traditional suppliers in recent years, the PRC has made good inroads into the world tea market; China reportedly has won a reputation for reliability and competitive prices.

Crude materials.—Unless there are hefty increases in world oil prices in 1982–85, the growth of China's crude material exports during this period is expected to be substantially lower than the 32 percent average annual increase registered in 1977–79. Oil sales account for roughly one-half of the PRC's crude material export earnings. Because of declining oil production and growing domestic demand, the volume of China's oil exports can be expected to fall over the next four years. The volume of oil exports in 1980 fell by 5 percent to 305,000 barrels/day. Unfortunately for Beijing, onshore oil production has begun to decline and oil from offshore fields is not expected to begin flowing commercially before 1985 at the earliest. (At the outset of China's modernization drive, Beijing reportedly had hope that oil would be a major source of the foreign exchange needed to finance the purchase of Western machinery and technology.) According to Beijing, petroleum production in 1981 fell by 100,000 barrels/day and is expected to drop by 200,000 barrels/day in 1982. Crude oil production in 1981 totalled 2.0 million barrels/day.

China already has informed Japan—the PRC's leading oil customer—that oil deliveries in 1982 will fall far short of the amounts pledged under the long-term trade agreement signed in 1979. Deliveries in 1981 totalled only 60 million barrels and the same level is expected in 1982. The agreement originally called for exports of 69 million and 110 million barrels, respectively.

Although Beijing is introducing more comprehensive and forward looking energy policies, rapid results are not expected. Project lead times and investment requirements, which are more massive than the Chinese are capable of making at this time, should hold down the growth of energy production through the mid-1980s. Growing domestic demand is expected to further limit the volume of oil exports despite China's recently launched conservation program and the push to use more coal and other alternative energy sources. While initial gains from conservation measures seem promising, similar gains cannot be repeated many years in a row. Furthermore, planned hydropower projects are not scheduled to come on line by 1985 and China apparently is having difficulty boosting coal output; coal production has been declining since 1979. The development of large new coal mines currently underway will not bear fruit until the mid- to late-1980s at best.

With the possible exception of coal, other important crude material exports—textile fibers and crude animal and vegetable materials—are expected to continue growing at roughly their 1975–79 pace. Exports of textile fibers rose at an average annual rate of 25 percent while crude animal and vegetable material exports increased annually by 19 percent. Since silk and animal hairs account for nearly all of China's hard currency textile fibers exports, sales of these goods should not be affected by rising protection sentiments in Western Europe against imports of synthetic fibers. The EC and Japan have been the leading importers of Chinese textile fibers and other crude materials—mainly bristles, and feathers, and plants and seeds.

Meanwhile, the future of China's coal exports is less certain because of the problems facing the coal industry and the use of coal as the country's major source of primary energy. Under a long-term bilateral trade agreement, coal exports to Japan—China's leading customer—are scheduled by 1983 to reach 3.5 million tons, or two and a half times 1979 deliveries. However, China may have difficulty in meeting the target since Beijing already is struggling to halt the decline in coal production. Coal output in 1980 fell by 2.4 percent to 620 million tons and in 1981 declined to 617 million tons. In the near-term, coal production should continue to be hampered by transport bottlenecks, hard currency shortages, and poor management practices.

Chemicals.—Chinese exports of chemicals, which account for roughly seven percent of the PRC's total hard currency exports, should maintain their healthy pace—at least through the early 1980s. In 1975–80, chemical exports rose at an average annual rate of 23 percent. Organic compounds, pharmaceutical products, fireworks, and resins comprise the bulk of these exports. Hong Kong, the EC, and Japan have been China's main customers for chemical products.

Manufactures.—Exports of manufactured goods, which account for about 45 percent of China's total hard currency merchandise sales, are expected to continue growing at a brisk pace over the next several years and then taper off. Since 1976, these exports have increased at an average annual rate of roughly 32 percent. Because of greater investment spending for light industry and an increasing number of compensation agreements involving the production of light industry goods, China's output of manufactures—particularly textiles products—presumably will continue to register substantial gains over the next several years. Growing protectionist sentiments in the West and rising consumer demand at home, however, are expected to dampen the growth of China's manufacture exports in the 1982–85 period.

Textile products account for roughly 45 percent of China's manufactured goods exports and have been the driving force behind the recent surge. Hard currency earnings from textiles in 1979 reaching a record $2.9 billion—double the 1976 level. Hong Kong, Japan, and the EC rank as the leading importers of Chinese textile products. In the past several years, the U.S. has become an important market for growth of China's manufacture exports in the 1982–85 period.

The near-term outlook also appears promising for China's other manufactured goods exports such as basketworks and other non-textile light industry goods; industrial metal products, especially nails, hand tools, and household utensils; and nonmetallic mineral products—mainly bulding materials. In recent years, China has achieved small but growing markets for these products. The emphasis Beijing has put on expanding the output of light industry and other sectors whose exports gains—at least in the near-term. Although China's Asian neighbors traditionally have been the PRC's main customers for these products, sales to Western Europe recently have increased sharply.

V. HARD CURRENCY TRADE AND DEBT OUTLOOK

Considering the above assessment, projected Chinese exports to the West in 1985 range from roughly $29 billion to $39 billion with projected PRC hard currency imports between $25 billion and $34 billion. The projections are based on an assumed high and low nominal average annual growth rate for each major commodity group for 1982–85 (see Table 6). Under the two scenarios, the implied average annual growth rates for China's total exports to the West over the

TABLE 6.—PROJECTED 1985 PRC HARD CURRENCY TRADE

[In billions of U.S. dollars]

		1985		Assumed average annual rate of growth, 1982–85 (percent)	
	1981	Low	High	Low	High
PRC exports	20.9	29.2	39.0	9	17
Foodstuffs	3.7	5.4	7.7	10	20
Crude materials	6.5	7.3	9.5	3	10
Chemicals	1.3	1.8	2.3	8	15
Basic and miscellaneous manufactures	8.5	13.4	17.6	12	20
Machinery and transport equipment	0.8	1.2	1.7	10	20
Other	0.1	0.1	0.2	10	20
PRC imports	17.1	25.3	34.3	10	19
Foodstuffs	2.8	3.4	4.9	5	15
Crude materials	3.7	5.8	7.7	12	20
Chemicals	1.7	2.5	3.2	10	17
Basic and miscellaneous manufactures	4.8	7.6	10.0	12	20
Machinery and transport equipment	4.0	5.9	8.3	10	20
Other	0.1	0.1	0.2	10	20
Total turnover	38.0	54.5	73.3		

[1] Estimated.

next four years are 22 percent and 27 percent while the rates for imports are 22 percent and 29 percent.

In contrast with the assumptions used for the high export scenario, the low scenario assumes that China will suffer several poor harvests and experience greater difficulty in boosting fish output; oil production falls faster than expected while coal output remains virtually unchanged despite Beijing's efforts to boost production; and PRC exports of manufactures—particularly textiles—face more formidable Western trade barriers. On the import side, the low scenario assumes severe hard currency shortages because of poor export performance; lower grain import requirements as a result of above average harvests; slower growth of crude material and semimanufacture import needs because of weaker Western demand for light industry products—particularly textiles; continued highly selective buying of Western machinery and technology; and greater difficulty in getting China's offshore oil development program underway.

As in the past, the PRC most likely will try to keep its trade with the West in balance and minimize the use of foreign credits. Consequently, China's medium- and long-term foreign borrowing over the next four years probably will be held to $12–$16 billion; credits associated with compensation trade should account for a large share of this borrowing. This amount of borrowing would result in a medium- and long-term debt at the end of 1985 of $10–$13 billion.

Beijing is expected to turn first to soft loans from international financial institutions and development assistance credits such as those extended by Japan and Belgium to meet its financial needs. China in 1981 received from the IMF for general balance-of-payments use a $550 million stand-by-credit, an additional $190 million from its reserve tranche, and $380 million Trust Fund loan. In addition, Beijing received a $200 million World Bank loan for the improvement of science and technology education in China.

VI. PROSPECTS FOR U.S.-PRC TRADE

U.S. trade with China over the next five years is expected to grow at a substantially slower pace than the 95 percent average annual increase achieved since the arrest of the Gang of Four in 1976. Because the major legal impediments to bilateral trade already have been overcome, the successful resolution of any remaining obstacles while improving the commercial climate will have only a marginal impact on the level of trade. More importantly, however, the combination of hard currency shortages, the extension of the readjustment program, and the country's inability to absorb further substantial increases in imports should dampen China's demand for U.S. products in 1982–85. Chinese exports to the U.S., meanwhile, are expected to continue growing at a strong pace despite being hindered by the limited range of goods the PRC has to offer. Increases in Chinese textile exports to the U.S., to some extent, will be restricted at least through 1982 by the U.S.-PRC textile agreement. Domestic sensitivities also could limit the gains of other Chinese exports in areas such as footwear, prepared foods, and textile products not covered by the agreement. Furthermore, supply constraints are expected to hold down PRC sales of fuels and other raw materials to the U.S.

Political considerations also could play an imporant role in U.S.-PRC trade in the 1982–85 period. The moderates under Deng's leadership apparently have the upper hand but failure to successfully deal with China's serious economic problems or to meet rising consumer expectations could result in a shift toward the left and a possible retreat from the current policy of expanding commercial ties with the West.

The following is an assessment of U.S. exports to China for 1982–85 by major commodity categories.[4]

Foodstuffs.—Barring severe shortfalls in China's agricultural output, the volume of U.S. grain exports—wheat and corn—to the PRC should level off in 1982–85 because of hard currency shortages and the closing of the gap between domestic requirements and production. (Grain has accounted for virtually all of U.S. foodstuff exports to China and in 1980 was responsible for one-third of U.S. total sales. See Table 7 for a breakdown of U.S. exports to China.) As a result,

TABLE 7.—U.S. EXPORTS TO THE PRC

[In millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Average annual rate of growth, 1975–80 (percent)
Total exports	806.9	303.6	135.4	171.6	819.2	1,716.5	3,749.0	28
Foodstuffs (SITC 0, 1)	332.4	(1)	(1)	(1)	362.3	488.4	1,265.0	25
Wheat	234.0	0	0	0	250.2	214.1	1,039.3	----------
Corn	95.7	0	0	0	111.7	268.5	224.5	----------
Other	2.7	(1)	(1)	(1)	.4	5.8	1.2	----------
Crude materials (SITC 2, 3, 4,)	335.8	100.3	13.1	84.4	261.8	574.3	1,258.4	25
Soybeans	126.5	(1)	0	14.4	15.3	106.7	155.2	----------
Cotton	185.9	79.7	0	17.5	157.3	357.0	701.3	----------
Synthetic fibers	1.6	2.0	7.5	19.0	46.4	62.2	193.9	----------
Soybean oil	0	0	0	28.3	26.1	35.9	56.5	----------
Pulp and waste paper	.1	5.0	1.3	1.3	4.1	3.9	66.9	----------
Rough wood	0	0	0	0	0	0	41.4	----------
Other	21.7	13.6	4.3	4.0	12.6	8.6	43.2	----------
Chemicals (SITC 5)	10.1	5.3	10.4	20.0	60.5	125.9	383.0	83
Chemical elements	7.9	2.4	4.7	7.7	10.7	27.3	61.9	----------
Manufactured fertilizers	0	0	0	8.1	38.7	44.6	152.6	----------
Plastic materials	2.2	(1)	1.7	1.7	2.0	31.1	119.5	----------
Insecticides	0	.3	0	0	5.7	11.6	28.4	----------
Other	(1)	2.6	4.0	2.5	3.4	11.3	20.6	----------
Basic manufactures (SITC 6)	18.6	73.8	43.3	10.8	25.3	244.1	427.8	69
Leather	0	0	(1)	0	(1)	3.9	49.1	----------
Synthetic yarn	.4	0	0	.5	1.3	27.8	62.6	----------
Woven synthetic fabrics	0	0	0	(1)	.1	5.7	54.7	----------
Iron and steel tubes and pipes	2.6	12.0	10.9	.4	.6	150.4	8.0	----------
Iron and steel wire rod	0	0	0	0	.2	.1	28.7	----------
Copper	0	(1)	.1	(1)	4.5	6.5	.2	----------
Magnesium, beryllium	0	0	0	0	1.7	8.3	8.7	----------
Aluminum	(1)	46.8	26.5	5.3	(1)	1.9	15.2	----------
Interchangeable tools	3.8	.6	(1)	.9	13.5	18.1	28.5	----------
Paper and paperboard	7.1	1.4	(1)	3.4	.4	3.4	130.4	----------
Other	4.7	13.0	5.8	.3	3.0	18.0	41.7	----------
Machinery and transport equipment (SITC 7)	106.8	118.8	65.1	51.9	102.4	268.0	395.6	24
Plower generating equipment (not electrical)	20.7	24.2	22.0	6.3	11.2	3.0	12.9	----------
Office machinery	.1	.2	.4	1.9	1.1	10.8	30.6	----------
Metalworking machniery	0	4.7	3.1	3.5	6.7	10.3	6.9	----------
Construction and mining equipment	3.9	13.0	2.3	1.4	33.5	91.4	42.4	----------
Heating and cooling equipment	6.4	26.6	8.4	.3	.8	.5	4.3	----------
Pumps and centrifuges	7.8	26.6	11.5	1.4	7.3	9.6	18.8	----------
Telecommunication apparatus	2.7	.5	.4	.7	1.1	6.2	7.4	----------
Medical apparatus	.1	(1)	0	.1	.4	3.8	5.9	----------
Electrical measuring and control equipment	3.2	4.5	.9	1.5	10.2	41.8	39.9	----------
Road motor vehicles	.3	4.5	5.4	29.5	11.2	45.4	16.5	----------
Aircraft	60.1	2.5	.5	.3	.4	7.7	155.1	----------
Ships and boats	0	2	(1)	0	.7	5.0	8.1	----------
Other	1.5	11.3	10.2	5.0	17.8	32.5	46.8	----------

---

[4] U.S. exports to the PRC for 1981 are based on January–December trade data compiled by the Census Bureau.

TABLE 7.—U.S. EXPORTS TO THE PRC—Continued

[In millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Average annual rate of growth, 1975–80 (percent)
Miscellaneous manufactured goods (SITC 8)	2.7	5.0	3.4	4.5	4.2	15.2	17.0	36
Professional and scientific instruments	2.2	2.1	1.8	3.7	2.3	8.8	8.7	-----------
Other	.5	2.9	1.6	.8	1.9	6.4	8.3	-----------
Other	.5	.4	.1	.1	2.7	.6	2.2	27

[1] Negligible.

Source: U.N. Trade Tapes, 1974–80.

the dollar value of foodstuff exports is expected to grow in 1982–85 at a substantially slower pace than the 87 percent average annual rate registered since 1978; these exports rose only 5 percent in 1981. The U.S.-PRC grain trade agreement, which should eliminate the wide fluctuations that characterized U.S. grain exports in the 1970s, guarantees annual U.S. sales through 1984 of at least 6 million tons of grain—15 to 20 percent of which must be corn. The agreement also insures that the U.S. will maintain its role as China's leading supplier of foreign grain. In 1981, the U.S. exported to the PRC $1.3 billion worth of wheat—roughly 22 percent more than in 1980. U.S. corn deliveries, on the other hand, were down by nearly three-fourths to about $62 million.

Crude materials.—Because of the high priority placed on boosting textile production by the readjustment program, Chinese imports of U.S. crude materials should rise but at a substantially slower pace than the average annual increase of 76 percent registered since 1977. Hard currency shortages coupled with a good cotton harvest and Beijing's retaliation against U.S. textile import quotas are expected to dampen China's demand for U.S. cotton at least for a year or two. U.S. exports of cotton to the PRC in 1980 reached a record $701 million—roughly forty times the 1977 level—and accounted for about 90 percent of China's cotton imports from the West. In 1981, however, U.S. deliveries sharply fell to $464 million; a good domestic harvest and Beijing's displeasure with U.S. restrictions on imports of Chinese textiles reportedly were responsible for the drop. Meanwhile, Chinese demand for U.S. synthetic fibers has risen steadily and is expected to remain strong over the next five years because of high cotton prices and constraints on China's synthetic fiber production stemming from declining oil production and the recent cancellation of several petrochemical plant contracts. U.S. exports of synthetic fibers to China 1981 reached $327 million—more than seventeen times the value of 1977 deliveries. In recent years, the U.S. has become the leading Western supplier of synthetic fibers to China.

Because of the PRC's limited processing capability, U.S. exports of soybeans to China in 1982–85 are expected to grow at a much slower pace. If hard currency is available, the PRC may increase its purchases of U.S. soybean oil to meet growing domestic demand and maintain its profitable exports to Japan. China over the past several years has looked to the U.S. to satisfy nearly all of its soybean import needs.

U.S. soybean exports to the PRC grew sharply in 1977–80 and reached a record $155.2 million in 1980; deliveries in 1981 were $25 million lower. Meanwhile, PRC imports of U.S. soybean oil hit a record $56.5 million in 1980 but were cut by more than two-thirds in 1981. The U.S. currently is China's leading supplier of soybean oil.

Other commodities, such as timber and wood pulp could become important U.S. exports in the 1982–85 period and help keep U.S. raw material sales growing at a healthy pace. In 1980, the PRC began importing logs and timber from the U.S.; the value of these exports totalled $41.4 million. U.S. deliveries of logs and timbers in 1981 more than doubled and reached a record $99.2 million. At the same time, the PRC has increased sharply its purchases of U.S. wood pulp. U.S. pulp exports to China in 1981 totalled $68.6 million compared with only $3.9 million in 1979.

Chemicals.—U.S. chemical exports to the PRC should continue their upward trend in 1982–85 but at a slower pace because of China's foreign exchange constraints. With little additional production capacity expected over the next five years, Chinese demand for manufactured fertilizer should remain strong; the U.S. currently satisfies an estimated 20 percent of the PRC's import requirements. U.S. fertilizer deliveries in 1981 totalled $132 million—three times the 1979 level but roughly $20 million less than the 1980 level. China's efforts to increase agricultural output also should insure continued strong demand for U.S. pesticides. The U.S. supplies an estimated 30 percent of the PRC's hard currency insecticide imports and this share probably will increase over the next five years.

U.S. exports of plastic materials—mainly polyester resins—are expected to continue increasing at a healthy but slower pace. In 1981, Chinese imports of U.S. artificial resins totalled about $170 million compared with only $2 million in 1978. Because of this sharp increase, the U.S. has become a major supplier of artificial resin to China.

Basic manufactures.—Because of growing PRC demand for intermediate goods needed for China's light industry, U.S. exports of basic manufactures—mainly synthetic yarn, paper products, and leather—should continue to register strong gains in 1982–85. U.S. exports of synthetic yarn have grown sharply over the past several years and in 1981 totalled more than $200 million, or triple 1980 deliveries. Meanwhile, U.S. exports of synthetic woven fabric in 1981 increased by roughly $12 million to almost $70 million. U.S. exports of paper and paper products in 1980 jumped sharply to $130.4 million from $3.4 million in 1979. In 1981, however, deliveries slipped to $60.9 million. Growing Chinese demand for leather helped boost U.S. leather exports in 1981 to $63 million—roughly fifteen times the 1979 level. Until Beijing's efforts to develop China's offshore oil fields and expand existing onshore facilities are in full swing, U.S. exports of steel tubes and pipes are expected to remain at a low level. After reaching a record $150 million in 1979, these exports fell sharply in 1980 to about $8 million and in 1981 dropped to less than $1 million.

Machinery and transport equipment.—The general cutback in China's imports of Western machinery stemming from the retrenchment program is expected to reduce substantially the growth of U.S. equipment exports to the PRC in 1982–85. (For 1976–80, U.S. machinery exports rose at an average annual rate of 57 percent and in 1980 totalled about $400 million; deliveries in 1981 were roughly two-thirds this amount.) Beijing will continue to be highly selective in its purchases of Western technology and unless the U.S. has a clear technological advantage such as in the case of some oil equipment, electrical measuring and control equipment, and computers, China most likely will buy from countries that offer better financing. (The lack of competitive financing may be offset to some extent by soft loans to the PRC from the World Bank.) When the pace of China's offshore oil development picks up, Chinese demand for U.S. oil equipment could increase substantially. U.S. sales of computers and measuring and control equipment, meanwhile, should continue to rise steadily in 1982–85 as Beijing strives to upgrade the PRC technological base.

Construction, mining, and transport equipment were largely responsible for the sharp increase in U.S. machinery exports in 1978 and 1979. Machinery for China's petroleum industry—in particular, drilling equipment—has accounted for the bulk of U.S. construction and mining equipment exports. U.S. deliveries of drilling equipment, which totalled roughly $30 million in 1981, have declined steadily since reaching a record $72 million in 1979. U.S. exports of transport equipment, meanwhile, jumped sharply in 1980 because of the sale of three commerical aircraft worth $141.4 million and then fell to about $35 million in 1981.

Other manufactured goods.—U.S. exports of miscellaneous manufactured goods to the PRC over the next five years are expected to rise gradually largely because of China's effort to upgrade the country's scientific capabilities. Professional and scientific instruments—sales of which were in the neighborhood of $11 million in 1981—have accounted for roughly one-half of U.S. exports of miscellaneous manufactured goods.

The following is an assessment of U.S. imports from China for 1982–85 by major commodity categories.[5]

Foodstuffs.—PRC foodstuffs exports to the U.S., which increased at an average annual rate of 27 percent in 1975–80, are expected to continue growing at a healthy clip if Chinese production can keep pace with demand (see Table 8). In 1981, U.S. imports of Chinese foodstuffs rose roughly two-thirds to $98 million because of sharp increases in U.S. purchases of prepared vegetables and fish—particularly shrimp. Vegetable and fruit imports last year rose by more than one-half to $41 million while fish purchases jumped sharply to roughly $24 million after having fallen by $12 million to $6.6 million in 1979. Fish imports should continue to climb if Beijing succeeds in achieving the substantial increases in fish output anticipated as a result of the current program to modernize and expand the PRC's fishing fleet and processing capacity.

Other foodstuff exports to the U.S.—largely tea, spices, and honey—should continue to rise gradually over the next five years. Some Chinese foodstuff exports—in particular, prepared foods—may bump up against U.S. protectionism such as in the case of canned mush-

---

[5] Data for 1981 U.S. imports from the PRC are based on January–December trade data compiled by the Census Bureau and reflect the f.a.s. rather than the c.i.f. value for imports. For the sake of consistency, census data for 1980 and 1981 are used to compare U.S. imports from the PRC for 1981 with 1980 imports.

TABLE 8.—U.S. IMPORTS FROM THE PRC

[In millions of U.S. dollars]

	1974	1975	1976	1977	1978 [1]	1979 [1]	1980 [1]	Average annual rate of growth 1975–80 (percent)
Total imports	114.7	158.3	201.9	202.7	356.2	653.3	1,161.1	47
Foodstuffs (SITC 0, 1)	16.3	16.1	24.2	26.0	29.9	58.0	67.0	27
Fish	7.1	3.9	7.1	2.7	2.4	18.1	6.9	----------
Fruit and vegetables	2.0	2.8	5.7	8.7	11.5	12.6	27.7	----------
Tea	1.0	2.0	2.9	5.2	5.5	9.1	11.9	----------
Spices	1.9	3.0	4.9	4.6	3.4	4.8	3.3	----------
Honey	.3	.2	.2	.2	.3	7.3	7.4	----------
Other	4.0	4.2	3.4	4.6	6.8	6.1	9.8	----------
Crude materials (SITC 2, 3, 4)	16.8	19.5	40.9	45.2	65.0	182.0	302.3	62
Silk	2.7	3.0	4.0	2.3	4.8	7.2	5.0	----------
Fine animal hair (excluding wool)	1.3	.7	3.2	4.1	4.1	4.1	4.4	----------
Natural barium sulphate and carbonate		0	0	0	2.0	12.3	33.5	----------
Bauxite and concentrates of aluminum	(2)	.4	.9	0	0	3.1	13.8	----------
Ores and concentrates of tungsten	1.1	2.2	2.3	4.3	6.0	9.5	16.6	----------
Other ores and concentrates of nonferrous base metals	0	.1	.2	.4	.6	2.3	.6	----------
Bristles	5.9	3.3	8.1	8.7	7.5	10.0	9.8	----------
Bird feathers	2.1	3.0	14.2	19.0	26.1	10.1	26.1	----------
Plants, seeds and flowers	.9	.6	1.4	1.7	3.3	8.6	14.1	----------
Crude petroleum	0	0	0	0	0	77.0	20.1	----------
Petroleum products	.1	0	0	(2)	(2)	27.7	131.1	----------
Other	2.7	6.2	6.6	4.7	10.6	10.1	27.2	----------
Chemicals (SITC 5)	18.4	15.9	18.0	21.8	38.5	65.7	114.8	36
Cyclic alcohols and derivatives	0	0	0	0	3.4	7.7	8.0	----------
Oxides and halogen salts	.8	1.9	3.9	1.3	3.7	5.0	7.0	----------
Salts of metallic acids	0	0	0	0	.2	13.9	25.1	----------
Organic-inorganic heterocyclic compounds	0	0	0	0	.4	1.0	3.9	----------
Medicinal products	1.0	2.1	.8	1.1	2.5	4.7	11.4	----------
Essential oils	4.8	2.5	3.6	5.5	7.1	6.2	14.8	----------
Fireworks	1.0	3.5	6.6	10.0	13.9	17.7	25.8	----------
Gelatin and derivatives	1.2	.4	1.1	1.1	4.1	2.1	3.3	----------
Wood and resin-based chemicals products	8.2	4.2	.6	1.4	1.6	4.8	4.3	----------
Other	1.4	1.3	1.4	1.4	1.6	2.6	11.2	----------
Basic manufactures (SITC 6)	42.7	79.4	68.3	49.6	101.1	100.6	249.7	34
Woven cotton fabric	25.6	27.4	33.2	17.5	40.3	25.8	47.2	----------
Woven silk fabric	.1	.2	.6	1.1	1.6	2.3	7.0	----------
Woven wool fabric	(2)	(2)	(2)	.3	1.0	.6	2.8	----------
Hat bodies	.8	1.8	2.3	2.0	2.8	4.4	10.6	----------
Linens	.3	1.5	3.5	4.6	5.4	9.3	24.6	----------
Carpets	.7	.9	4.4	7.4	10.9	18.0	40.7	----------
Mats, screens, etc	.4	.7	1.9	2.3	4.1	6.0	12.5	----------
Pottery	.8	1.0	1.8	2.8	3.3	4.1	16.0	----------
Tin and tin alloys, unwrought	9.4	39.8	13.2	4.3	15.7	2.7	14.1	----------
Base metals, n.e.s	2.0	1.5	.8	1.1	4.5	5.3	31.9	----------
Nails, screws, nuts, bolts, etc	(2)	.1	.1	.1	3.9	9.9	14.4	----------
Metal household utensils	.2	.2	.2	.3	1.4	1.3	[illegible].5	----------
Other	2.4	4.3	6.3	5.8	6.2	10.9	24.4	----------
Machinery and transport equipment (SITC 7)	.1	.3	1.3	.5	.5	1.2	6.2	99
Nonelectrical machinery	(2)	.1	1.0	.4	.3	.8	3.9	----------
Electrical machinery	(2)	.1	.3	.1	.2	.4	2.3	----------
Transport equipment	.1	.1	(2)	(2)	0	(2)	(2)	----------
Miscellaneous manufacturered goods (SITC 8)	19.2	25.6	47.5	58.0	120.2	240.2	417.6	67
Furniture	.3	.5	1.3	1.9	3.8	3.9	9.6	----------
Travel goods, handbags, etc	.1	.2	.8	1.3	.9	.9	3.0	----------
Clothing	5.5	8.8	16.5	25.5	68.5	165.8	278.0	----------
Leather footwear	.4	1.1	3.2	3.3	3.8	16.2	20.1	----------
Articles of plastics, n.e.s	.5	.4	.4	.5	1.4	2.5	.7	----------
Toys, games and sporting goods	.5	.2	.4	.6	.7	1.0	2.8	----------
Art and antiques	7.8	6.0	11.6	9.0	12.8	16.5	39.1	----------
Jewelry	.3	.7	1.0	1.1	1.7	1.6	6.9	----------
Basketwork	2.6	5.8	10.1	10.7	20.3	26.4	43.0	----------
Feather goods, n.e.s	(2)	.1	.7	2.6	3.5	1.2	3.1	----------
Other	1.2	1.8	1.5	.5	2.8	4.2	11.3	----------
Other	1.2	1.5	1.7	1.6	1.0	4.7	3.5	----------

---

[1] Data for 1978, 1979, and 1980 are c.i.f. (cost, insurance, and freight).
[2] Negligible.

Source: U.N. Trade Tapes, 1974–80.

rooms. (U.S. imports of Chinese canned mushrooms in 1980 jumped to $15.7 million from about $200 thousand in 1979. Deliveries last year totalled $24 million.)

Crude materials.—Unless there are substantial increases in world oil prices over the next five years, the growth of China's crude material exports to the U.S. in 1982–85 should slow substantially. (In 1981, crude material purchases from the PRC more than doubled to roughly $630 million. A $185 million surge in imports of Chinese peanuts, which resulted from the temporary raising of U.S. import quotas, accounted for more than one-half of the increase.) Since 1979, petroleum deliveries have been responsible for a large share of the sharp increases in U.S. crude material imports from China and have been a major contributor to the rapid growth of U.S. total imports from the PRC. Because of the expected decline in China's oil production, however, the volume of oil exports to the U.S. most likely will begin to decline over the next five years. U.S. oil imports in 1981 more than doubled and reached a record $293 million; a shift to higher priced petroleum products and away from crude oil largely was responsible for the increase in the dollar level of imports.

The outlook for substantial increases in exports of other crude materials—particularly nonferrous metals and minerals—also appears slim at least over the next five years. Because of production limitations, Chinese exports of nonferrous metals to the U.S. are not expected to play a major role in U.S.–PRC trade in 1982–85. Several projects that were designed to help boost China's nonferrous metal output reportedly have been postponed or cancelled. In 1981, Chinese exports of metal ores and concentrates—mainly tungsten ore and bauxite—to the U.S. rose by roughly one-third to $48 million. Deliveries of natural barium sulfate and carbonate, which have accounted for a growing share of Chinese crude material exports to the U.S., amounted to $28 million in 1981—an increase of roughly one-half.

Chemicals.—U.S. imports of Chinese chemical products are expected to continue rising but at a slower pace. Since 1974, these imports have grown at an average annual rate of 36 percent and in 1981 they accounted for about 7 percent of U.S. total imports from the PRC. Inorganic chemicals—particularly salts of metallic acids—and, to a lesser extent, fireworks largely have been responsible for the sharp increases in U.S. imports of Chinese chemical products in recent years. U.S. imports of cyclic alcohols—largely menthol—also have registered strong gains in recent years.

Basic manufactures.—U.S. imports of basic manufactures from China over the next five years are expected to continue growing at a strong pace. These imports in 1975–80 rose at an average annual rate of 34 percent and in 1981 increased by roughly 60 percent to $377 million. Beijing's drive to increase light industry output coupled with the recent signings of a substantial number of compensation deals with Western firms involving the production of these goods should insure an ample supply of basic manufacturers for sale abroad. On the demand side, however, U.S. protectionism could dampen Chinese sales to the U.S. since several key manufactured goods exports involve potentially sensitive items. While textile fabric imports are not specifically restricted under the U.S.–PRC textile agreement, the U.S. according to the agreement can request consultation with the PRC if these imports cause market disruption. U.S. imports of textile fabrics, which generally have been China's leading basic manufactures exports to the U.S., totalled in 1981 roughly $105 million—almost double the 1980 level.

Other basic manufactures exports to the U.S. that have registered substantial gains in recent years include carpets, linen, hat bodies, pottery, and titanium.

Machinery and transport equipment.—Chinese exports of machinery and transport equipment in 1982–85 are expected to register healthy increases but remain only a small share of China's total exports to the U.S. Inexpensive machine and hand tools along with electrical products largely should account for the gains; recent compensation deals with Western firms are expected to help spur these exports. In 1981, U.S. imports of Chinese machinery and equipment jumped by more than fivefold to $40 million. General industrial machinery and parts mainly were responsible for the sharp increase.

Miscellaneous manufactured goods.—U.S. imports of miscellaneous manufactured goods are expected to continue at a rapid pace at least over the next several years. However, growth to some extent should be curbed by textile quotas; import restrictions on other commodities also may become a factor. Since 1974, imports of miscellaneous manufactured goods have risen on the average a hefty 67 percent annually and in 1981 topped $620 million—roughly one-third of all U.S. purchases from China. In addition to restricting the growth of major Chinese clothing exports to the U.S. such as cotton knit blouses and skirts, cotton trousers, and synthetic fiber sweaters, the textile accord includes a mechanism for levying quotas on other clothing and textile product imports. (Clothing accounts for roughly two-thirds of China's miscellaneous manufactured exports to the U.S. and has been largely responsible for the recent surge in these exports.) The U.S. already has curbed imports of Chinese wool sweaters and cotton coats and chances are good that quota negotiations on other items will be undertaken before the agreement expires at the end of 1982. U.S. clothing imports from China more than doubled in 1979 to $166 million, sharply rose to $278 million in 1980: and climbed to $416 million last year. In either case, the list of categories covered by specific quotas probably will be expanded.

Chinese footwear exports to the U.S. also may bump up against U.S. protectionism. Although small in comparison with U.S. imports from other countries such as South Korea and Taiwan, Chinese footwear sales to the U.S. already have invoked complaints from U.S. shoe manufacturers. U.S. purchases of footwear from China have risen sharply in the past three years and in 1981 totalled $36 million; imports in 1978 amounted to only $3.4 million.

VII. PROJECTED 1985 U.S.-PRC TRADE UNDER ALTERNATIVE SCENARIOS

Considering the above assessment, projected U.S. exports to the PRC in 1985 range from $4.3 billion to $6.1 billion with projected

---

[•] If U.S. exports to and imports from Taiwan increase over the next five years by the same average annual rate as in 1975–80. then U.S. export to Taiwan in 1985 would total roughly $11 billion and U.S. imports would be slightly over $18 billion.

U.S. imports between $4.1 billion and $6.0 billion.[6] The projections are based on assumed nominal average annual rates of growth in 1982–85 for each major commodity category under a high and low scenario. (The assumed growth rates are contained in Table 9.) The implied annual growth rates for U.S. total exports to the PRC over the next four years are 5 percent and 14 percent while for U.S. imports the rates are 21 percent and 33 percent. Under the scenarios, the trade imbalance in 1985 ranges from a $2 billion U.S. surplus—slightly higher than the U.S. enjoyed in 1981—to a $2 billion U.S. deficit.

In contrast with the assumptions used for the high export scenario, the low scenario assumes a larger reduction in the growth of U.S. grain, soybean, and cotton exports; greater softening of Chinese demand for U.S. fertilizers and other chemical products; only marginal increases in sales of steel tubing and oil equipment because of difficulties in getting offshore oil development underway; and a slower growth for other U.S. machinery and transport equipment exports stemming from a further extension of the retrenchment program and severe hard currency shortages. On the U.S. import side, the low scenario assumes greater difficulty on the part of China to boost exports coupled with a slower rise in world oil prices; and greater restrictions on U.S. imports of Chinese textile products and other light manufactured goods.

TABLE 9.—PROJECTED 1985 U.S. TRADE WITH CHINA

[Dollar amounts in millions of U.S. dollars]

		1985		Assumed average annual rate of growth, 1982–85 (percent)	
	1981 [1]	Low	High	Low	High
U.S. exports (f.a.s.)	$3,599	$4,316	$6,130	5	14
Foodstuffs (SITC 0, 1)	1,333	1,620	2,331	5	15
Crude materials (SITC 2, 3, 4)	1,128	1,270	1,775	3	12
Chemicals (SITC 5)	405	492	708	5	15
Basic manufactures (SITC 6)	447	586	867	7	18
Machinery and transport equipment (SITC 7)	263	320	414	5	12
Miscellaneous manufactured goods (SITC 8)	18	22	28	5	12
Other (SITC 9)	5	6	7	5	10
U.S. imports (f.a.s.)	1,895	4,123	6,040	21	33
Foodstuffs (SITC 0, 1)	98	157	207	12	20
Crude materials (SITC 2, 3, 4)	627	640	937	0	10
Chemicals (SITC 5)	126	183	305	10	25
Basic manufactures (SITC 6)	377	1,229	1,636	35	45
Machinery and transport equipment (SITC 7)	40	133	202	35	50
Miscellaneous manufactured goods (SITC 8)	622	1,771	2,741	30	45
Other (SITC 9)	5	10	12	10	15
Total turnover	5,494	8,439	12,170		

[1] Estimates based on Census trade data for January–December 1981.

CZECHOSLOVAKIA: PERFORMANCE AND PROSPECTS IN TRADE WITH THE UNITED STATES AND THE WEST

By Lawrence Kessler

CONTENTS

Page
Summary 78
I. Czechoslovak Objectives and Performance During the 1970s 79
II. Czechoslovak Hard Currency Debt at Yearend 1979 80
III. Czechoslovak Hard Currency Trade Objectives and Strategy: 1981–85 81
IV. Czechoslovak Hard Currency Export Capabilities 1981–85 85
V. Czechoslovak Hard Currency Trade and Debt Outlook 1981–85 87
VI. U.S.-Czechoslovak Trade Potential Under Normalized Conditions 89
VII. Projected 1985 U.S.-Czechoslovak Trade Under Alternative Scenarios 92

APPENDIX TABLES

A–1. Czechoslovak Foreign Trade by Major Trading Groups, 1960–79 93
A–2. Czechoslovak Trade with the West, 1970–79 93
A–3. U.S.-Czechoslovak Trade, 1974–79 93
A–4. Czechoslovak: Hard Currency Debt 94
A–5. Czechoslovak Trade with the Industrialized West and U.S., 1974–79 94
A–6. Composition of Czechoslovak Imports from the Industrialized West, 1974–79 95
A–7. Leading Czechoslovak Imports from the Industrialized West 96
A–8. Origins of Leading Czechoslovak Imports from Industrialized West 97
A–9. Industrialized West Export Trade Shares to Czechoslovakia, 1974–79 98
A–10. Composition of Czechoslovak Exports to the Industrialized West, 1974–79 99
A–11. Leading Czechoslovak Exports to the Industrialized West 100
A–12. Industrialized West Import Trade Shares from Czechoslovakia, 1974–79 101
A–13. Projected 1985 Czechoslovak Trade with the Industrialized West 102
A–14. Projected 1983 and 1985 Hard Currency Trade and Debt Levels Under Selected Trade Growth and Interest Rate Assumptions 102
A–15. Projected 1985 U.S.-Czechoslovak Trade 103

SUMMARY

The slowdown of economic growth experienced in the late 1970's will continue to confront Czechoslovakia in the 1980's. Czechoslovakia's industries utilize energy inefficient machinery and outdated plant processes which exacerbate already declining rates of productivity. Tight national budgets, calling for low annual growth rates in investments (0–2 percent) will slow allocations to many vital industrial complexes. The agricultural sector will continue to be beset by structural problems, in addition to possible adverse climatic conditions.

In the 1970s, the Husak government imported large quantities of Western machinery, chemicals, iron and steel, and foodstuffs and sustained an annual GNP growth of over 4 percent. In coming years, however, Czechoslovak economic growth will be constrained by three factors.

1. *Slowdown in hard currency earnings from exports to the Industrialized West* (*I.W.*)—Czechoslovakia faces increased foreign competition in its traditional transport and machinery equipment sales to the West. Czechoslovakia will rely on greater domestic consumption of coal, chemicals, and iron and steel which will reduce overall exports. Exports to CMEA, despite foregone hard currency earnings from the West, will have top export priority.

2. *Rise in essential hard currency expenditures.*—Larger and more expensive oil imports from OPEC, greater need to supply parts for imported Western machinery, and agricultural imports to supplement potentially poor harvests will absorb an increasing share of hard-currency outlays.

3. *Conservative financial practices.*—Concern over growing (yet still modest by CMEA standards) hard currency debt—roughly $3 billion by end 1980—will serve to limit eurocurrency borrowings.

In view of these factors, the pace of growth in Czechoslovak trade with the Industrialized West should fall in the 1980's. In the 1974–79 period, Czechoslovak exports to the Industrialized West rose 12.2 percent annually. According to our projections, exports will rise about 8.5 percent annually and could range between $4.1 and $4.5 billion in 1985. The same should hold for Czechoslovak imports from the Industrialized West, which rose 9.5 percent annually in the 1974–79 period and probably will rise about 8 percent annually in the next five years. Thus, purchases from the Industrialized West will likely range from $4.1 to $4.5 billion annually by 1985, putting trade with the Industrialized West roughly into balance.

The level of U.S.-Czechoslovak trade probably will not expand significantly in the 1981–85 period. Even under highly optimistic assumptions, U.S. exports to Czechoslovakia should not rise much above the record 1979 level of $306 million. U.S. imports from Czechoslovakia will rise slowly in this period to reach possibly $90–100 million in 1985.

I. CZECHOSLOVAK OBJECTIVES AND PERFORMANCE IN TRADE DURING THE 1970's

A. TRADE WITH THE WEST

Czechoslovakia derives economic benefits in trading with CMEA and has integrated its economy closely with its CMEA trading partners. During the 1970's, Czechoslovakia's trade with the West remained constant at approximately 30 percent of total foreign trade. Trade turnover with the West rose substantially from $3.1 billion in 1974 to $5.1 billion in 1979, an average annual increase of 13.7 percent. West Germany remained by far Prague's most important Western trading partner, accounting for nearly 40 percent of total trade with the West in the 1974–79 period. (See Table A–1.)

Until the mid-1970s, Czechoslovakia had neither substantial debt nor a serious hard currency deficit with the West. Western recession and global inflation accompanied by sizable Czechoslovak imports of costly capital goods and food items, resulted in a substantial deterioration in the country's terms of trade with the West. These events had a negative impact upon Czechoslovakia's hard currency trade balance, which was in deficit in 1975 and 1976 by $994 million. From 1977–79 hard currency exports grew at 17.1 percent annually while import growth slowed to 9.3 percent annually. This narrowed the hard currency deficit to near balance by the end of 1979. Persistent hard currency trade deficits, however, forced Prague, with the lowest external debt in Eastern Europe, to utilize Western credits and draw upon the Eurocurrency market extensively to finance imports in 1979. (See Table A–2.)

B. TRADE WITH THE U.S.

The volume of U.S. trade with Czechoslovakia rose substantially from $94 million in 1974 to $330 million in 1979 (See Table A–3). However, 1979 was not a typical year for U.S.-Czechoslovak trade. As a percentage of total trade with the West, U.S.-Czechoslovak trade rose from 3 percent in 1974 to over 6 percent in 1979, with 4 percent as a representative percentage over this time period. Czechoslovak imports of U.S. agricultural goods accounted for the bulk of the trade between the two countries.

Czechoslovakia amassed its largest bilateral hard currency deficit with the U.S. in 1979. The U.S. surplus of $231 million in 1979 was the largest U.S. trade surplus with Czechoslovakia ever recorded. Czechoslovak exports to the U.S. have failed to keep pace with imports from the U.S. for a number of reasons. The primary reason is these exports are subject to the Column II duty rate, since the U.S. and Czechoslovakia do not extend reciprocal most favored nation tariff treatment. For some items, notably hops, furniture, steel products, textiles, and glassware, the non-MFN tariff rate is double, and in some cases, triple the MFN tariff rate. However, even if the U.S. applied MFN tariff rates to Czechoslovak products, export growth would be modest. Czechoslovak machinery exports have become progressively less competitive with similar products from other countries (including LDC's), due to obsolescence, slow response to Western market conditions, and problems in meeting delivery schedules and maintaining stocks of spare parts. In addition, Czechoslovak marketing efforts in the U.S. have been on a smaller scale than those in Western European countries, reflecting the relatively lower priority accorded to trading with the U.S.

II. CZECHOSLOVAK HARD CURRENCY DEBT AT YEAREND 1979

A. DEBT GROWTH AND BORROWING STRATEGY DURING THE 1970'S

Between 1971 and 1975, Prague maintained the most cautious borrowing policy among CMEA nations. At the end of 1975, Czechoslovakia's debt to commercial banks was under $850 million. Favorable terms of trade with the West, low cost of energy imports from the U.S.S.R. prior to 1975, manageable hard currency trade deficits, and greater reliance on government backed credits, allowed planners to pursue a cautious borrowing strategy.

Circumstances forced changes in the second half of the 1970s. Western recession and the increased competition for export markets slowed Czechoslovak export earnings. Import prices of key industrial products and grain rose sharply. Thus, Czechoslovakia had to increasingly rely on Western credits (primarily from banks) to finance the resulting hard currency deficits with the West.

Nevertheless, by year-end 1979, both Prague's debt service ratio of 20 percent and its net hard currency debt of $3.1 billion remained the lowest in Eastern Europe. By 1981, however, Czechoslovakia net debt rose to nearly $4 billion, second lowest in CMEA. Western bankers became concerned over the shorter term nature of the debt. In addition all Eastern European borrowers have been somewhat advesely affected by Poland's debt problem. As a result, Czechoslovakia will probably find it increasingly difficult to raise money through syndicated loans in 1982.

B. COMPOSITION OF DEBT

Table A–4 breaks down Czechoslovakia's hard currency debt as of end–1979, to include the composition of debt, amount owed to the U.S. banks and Czechoslovakia's hard currency assets. As is shown, Prague's gross hard currency debt has risen rapidly from only $485 million in 1971 to almost $4.0 billion in 1979. Government-backed debt as a percentage of total gross debt (including commercial debt) has dropped sharply from 41 percent in 1971 to under 12 percent in 1979. Prague's need for large scale borrowing in the second half of the 1970s, combined with its preference for general purpose bank credits (rather than project-tied loans from official export credit agencies), contributed to this shift in borrowing strategies. In the 1980s Czechoslovakia has indicated plans to utilize more project-tied loans.

C. U.S. SHARE OF THE DEBT

U.S. banks held only 6.5 percent of the total commercial debt in 1979, down from 8.4 percent in 1977. Czechoslovakia is not eligible for U.S. Government credits or credit guarantees.

III. CZECHOSLOVAK HARD CURRENCY TRADE OBJECTIVES AND STRATEGY: 1981–85

A. RECENT IMPORTS AND OBJECTIVES

About 55 percent of Czechoslovak imports from the West in the 1970s fell under two headings: machinery and transport equipment, and chemicals. The largest category consistently has been machinery and transport equipment. These imports (over $895 million in 1979) have enabled Prague to begin to upgrade inefficient industries and exploit deeper, more inaccessible coal mines. Chemicals ($526 million in 1979) was the next largest category, followed by basic industrial goods ($445 million) and foodstuffs ($320 million). (See Table A–5 for details.)

Czechoslovakia expanded its purchases of Western goods at an average annual growth rate of 9.5 percent in the 1974–79 period. This was a very modest expansion when inflation is taken into account. Imports from the non-socialist countries, including the underdeveloped countries, are planned to increase by less than the 7.5 percent anticipated growth in Czechoslovak exports to these countries. Efforts to maintain the hard currency trade balance recorded in 1980 will concentrate on expanding exports to Industrialized Western and less developed countries, while at the same time limiting imports from these countries. The Czechoslovak Government has announced a new austerity program to slow annual growth rates to under 2 percent in order to limit import growth. It also called for increased use of monetary incentives for businesses to improve efficiency, quality and productivity in the economy.

Some of the objectives of Czechoslovak investment strategy that will affect Western imports are:

Priority for hard currency allocation to projects which yield an early return of hard currency.

Concentration on modernization of plants and processes to spur production of domestic resources especially lignite and brown coal.

Better utilization of existing production facilities by modernization and reconstruction of outdated equipment and processes. Importation of Western machinery and technology only where necessary.

Imposition of stricter domestic investment criteria by the central authorities.

The next four sections provide a brief overview of each import category, with growth prospects through 1985 (see Table A-6 and A-7).

Machinery equipment.—Imports of machinery totalled over $800 million in 1979 and played a role in Prague's effort to boost industrial and mineral resource production and efficiency. In a clear effort to revitalize Czechoslovakia's heavy industries, Prague imported machinery for its mining and paper industries. Other important imports included lifting and loading machines for construction, heating and cooling equipment for the food industry and machine tools for metalworking. A significant portion of hard currency was spent on replacement parts for previously imported machinery.

In the next five years, Prague intends to increase imports of nonelectric and electric machinery. Czechoslovak economists have written at length about the declining quality of the country's exports, which now have difficulty competing with those of other Eastern European countries. The Premier has noted that Czechoslovak industry consumes 20 to 50 percent more energy, metals, and other material inputs per unit of output than do comparably developed countries. Imports of Western machinery are thus viewed as necessary to modernize Czechoslovak industry. New equipment is also essential for Prague's ailing mining industry. The Czechoslovak Government has decided to increase reliance on domestic resources to meet increasing energy needs. Extraction of brown coal and lignite will become a key problem as the rise in production must come from deposits increasingly difficult to exploit. Prague will seek to purchase Western equipment and technology including tunneling machinery, hydraulic roof supports, climate control equipment, and other related equipment which is not adequately produced within CMEA.

Accompanying the effort to expand energy sources will be greater attention to conservation of energy. The Czechoslovaks have indicated interest in energy conservation equipment such as climate control systems, demand regulators for process industries, thyristor motors, waste heat recovery systems and power transmission and distribution equipment.

Chemicals.—Imports of chemicals from the West totalled $526 million in 1979. Over 20 percent of Czechoslovak imports have been of this category. Imports of organic chemicals such as alcohols, organic acids, nitrogen compounds for fertilizer and hydrocarbons accounted for nearly $170 million in 1979. Plastic materials including products of polymerizing and condensation were also important imports.

In 1979, the Czechoslovak Government instituted a new chemical import policy, designed to bring trade in chemicals more into balance. However, in 1979 the deficit in chemicals trade rose from $271 in 1978 to $331 million. Production losses created by outdated machinery and processes rose substantially in 1979. Export targets were achieved at the expense of depriving domestic industry. The chemical industry was then forced to increase imports substantially from the West, sending the chemical trade further into deficit.

One of the goals in the new Five-Year Plan is to formulate a realistic modernization policy for the chemical industry. It is hoped that domestic production will become less costly through greater utilization of more advanced Western processes and restructuring of production to reduce consumption of refined petroleum. Emphasis will be placed upon production of basic chemicals, polymers and organic paints and dyes. To satisfy this goal, Czechoslovakia has indicated interest in Western technology for specialized chemical production such as special polymers, rubber, paints and agrochemicals. Chemicals exports of hydrocarbons and organic acids will be curtailed as more products of the chemical industry are consumed domestically. With imports of alcohols, nitrogen compounds and hydrocarbons in high demand, the chemical trade with the West will probably continue to be in deficit over the next five years.

Basic industrial goods.—Imports of basic industrial goods totalled $445 million in 1979 and comprised over 17 percent of Czechoslovak imports from the West. Iron and steel pipes and high pressure conduits totalling over $100 million, were the most important items in the category. These imports were utilized to transport oil and natural gas throughout Czechoslovakia.

In the next five years, the Czechoslovak Government intends to embark on an economic austerity program. Emphasis will be placed on completing unfinished projects or refurbishing old plants, rather than erecting new facilities. It is expected that use of Western technology will provide greater output in foundries and steel mills already on stream. Thus, import demand for iron and steel should slowly fall. Higher prices and increased consumption of nonferrous metals and textile yarns, however, will tend to increase the overall cost of imports in this category.

Foodstuffs.—Imports of foodstuffs totalled $326 million in 1979—over 12 percent of total Czechoslovak imports from the West. This import category showed the greatest fluctuation in the 1974–79 period, reflecting Czechoslovak inability to sustain agricultural production.

The annual import growth rate averaged nearly 17 percent, the highest among the categories. The disastrous 1979 Czechoslovak grain harvest of 9.2 million tons—2 million tons below the plan—made necessary large purchases of cereals, valued at $326 million.

Agricultural output failed to meet planned targets in three of the last five years. However, at 10.7 million tons the 1980 harvest was a major improvement over 1979. Thus, imports for 1980–81 were drastically reduced over those of 1979–80. The 1981 harvest yielded 9.6 million metric tons (the plan was for 11 million metric tons). Despite this agricultural shortfall, the Government intends to keep grain imports to a minimum.

In order to achieve the goal of greater self-sufficiency in foodstuffs in the next five years, four conditions must be met. First, in foodstuffs the proportion of imported grain feed in animal diets must decrease. If livestock herds must rise to meet consumption demands, cattle production will probably be emphasized because they feed on domestic grasses. Second, corn production must rise. Third, income and other economic incentives must become more attractive to keep people on the farms. Finally, weather is the most important factor. In the last few years, unfavorable weather conditions have seriously disrupted agricultural output.

B. OTHER IMPORT NEEDS

Only essential technology that is unobtainable from CMEA will be imported from the West. Purchase of non-essential Western products will go through intensified scrutiny.

One new area where Czechoslovakia will be compelled to spend more hard currency is for petroleum products. The U.S.S.R. had supplied Prague with 95 percent of its crude oil needs in 1974–79, enabling Czechoslovakia to export a *percentage* of these products to the West.[1] During the next five years the percentage of oil supplied by the U.S.S.R. will decrease by at least 10 percent. The U.S.S.R. originally announced plans to supply Prague with 19.2 million tons of oil annually in the 1981–85 period. According to our estimates, Prague would then have had to import 10–15 percent of its petroleum needs from OPEC by 1985. This import requirement may rise, however, if the U.S.S.R. cuts petroleum exports.

Czechoslovakia currently runs a small trade surplus with the OPEC nations. Prague will be able to cover these projected 1985 oil imports from OPEC if its exports to OPEC grow 20 percent annually.

C. CONSTRAINING FACTORS

The amount of goods Czechoslovakia can afford to import from the West is constrained by hard currency availability. The Czechoslovak Government has stated that it will not finance increased trade deficits through greater reliance on Western credits. Czechoslovakia recognizes the difficulty in markedly increasing hard currency export earnings, considering the West's economic slowdown and its own industrial shortcomings. Should oil import from OPEC rise dramatically in the 1980's, Prague's other vital import purchases will either be greatly constrained or Czechoslovakia will be forced to expand the use of Western credits.

---

[1] The cost of CMEA to import oil from the Soviet Union increased dramatically in 1975 when prices became based on a five year moving average of world market prices. Czechoslovakia purchases 5 million tons of Soviet crude (about 26 percent of total oil imports from the U.S.S.R. in 1979) at $3 per ton, an advantageous price fixed in 1966 in repayment for credits granted by Czechoslovakia to the U.S.S.R. This arrangement will last until 1984, and has to some extent lessened the impact of increased oil prices on the economy.

IV. CZECHOSLOVAK HARD CURRENCY EXPORT CAPABILITIES 1981–85

A. RECENT EXPORTS AND OBJECTIVES

About 43 percent of Czechoslovak exports to the West in the 1970's fell under five headings. The largest category consistently has been basic industrial goods. These exports (over $750 million in 1979) accounted for nearly 30 percent of Prague's hard currency export earnings. Miscellaneous manufactured goods ($355 million in 1979) was the next largest category, followed by crude materials ($353 million), machinery and transport equipment ($336 million) and mineral fuels ($326 million). Table A–10 breaks down Czechoslovakia exports by one digit SITC category.

Despite complaints that difficult international marketing conditions, low demand, and heightened Western trade barriers hampered Czechoslovak exports, results in the 1976–79 period were good. Only in 1976 and 1978 did Czechoslovak exports fail to exceed planned targets, while in 1979 exports exceeded targets by a wide margin in most categories. This good export performance can be in part explained by conservative export targets submitted by Czechoslovak foreign trade planners. These positive results allowed Czechoslovakia to rely less heavily on Eurocurrency borrowings than its Eastern bloc neighbors.

Nevertheless, the overall Czechoslovak foreign trade picture was not so rosy. Despite the unexpected expansion of exports, some 2 percent over planned target levels in 1979, trade deficits continued to accumulate because of large feedgrain and chemical imports. Prospects to curtail these deficits will be difficult in the 1981–85 period for the following reasons:

1. Engineering branches must continue to bear the brunt of the country's export drive in the short and medium term. In the past this sector has designed and produced electric and non-electrical machinery as well as transport equipment. Exports of these goods accounted for 13 percent of Prague's hard currency earnings in 1979. The engineering sector, however, utilizes many outdated production methods and has become less competitive in foreign markets. Increased investment in the sector is unlikely considering the constraints imposed on the national budget by the enormous expenditures (34 percent of all Czechoslovak investment funds) required to develop a nuclear power industry. Purchase of advanced Western technology, equipment and processes is becoming an increasingly expensive alternative as Czechoslovak industries must allocate more and more of their hard currency quotas for spare parts.

2. In view of shrinking domestic reserves of metals, minerals, and timber, exports of these goods must be reduced. These exports earned

$758 million and accounted for nearly 30 percent of Prague's total exports in 1979.

3. Domestic market requirements will probably necessitate lower export growth rates of consumer goods and chemical products.

The next five sections provide a brief overview of each export category, with growth prospects through 1985.

Basic industrial goods.—Exports of basic industrial goods totalled $752 million in 1979, and comprised nearly 30 percent of total Czechoslovak exports to the West. Iron and steel tubes, plates and bars, totalling over $200 million, were Prague's most important export items in this category. Textile yarns ($155 million) and non-metal minerals ($114 million) were other important exports in the basic industrial goods category.

In the 1974–79 period, exports in this category grew 11.4 percent annually. Judging from remarks by Czechoslovak leaders, the export growth rate in this category from 1981–85 should slow considerably. More iron, steel, and non-metal minerals will be utilized domestically. Nevertheless, exports of basic industrial goods will most likely remain Prague's most important export category.

Miscellaneous manufactured goods.—Exports of miscellaneous manufactured goods totalled $355 million in 1979 and comprised nearly 14 percent of total Czechoslovak exports to the West. Clothing, totalling near $130 million, was Prague's seventh largest overall export and the most important export in this category.

Czechoslovakia intends to limit the growth in exports of these goods in 1981–85, diverting more of total production to domestic use. This will be part of a general effort to placate Czechoslovak consumers at a time of increasing austerity.

Crude materials.—Exports of crude materials totalled $353 million in 1979 and comprised nearly 14 percent of total Czechoslovak exports to the West. Wood and lumber, totalling $243 million was Czechoslovakia's second largest export overall and by far the most important crude materials export.

Exports of wood and lumber, grew over 18 percent annually in the 1974–79 period. A combination of high world demand and the need to raise hard currency revenues led to this expansion. However, this higher-than-planned export growth created substantial drops in timber reserves which, if left uncorrected, could severely hamper Czechoslovakia's timber industry in the decades to come. Thus, Czechoslovakia will endeavor to decrease timber exports and replenish stocks in the next few years. Exports of crude fertilizers and metal ores also should not expand substantially.

Machinery and transport equipment.—Exports of machinery and transport equipment totaled $337 million in 1979, over 13 percent of total Czechoslovak exports to the West. Non-electric machinery, primarily machine tools for metal, totaling $200 million, was Prague's third largest export at the 2-digit SITC level and the most important export in this category. Transport equipment ($76 million) and electrical machinery ($60 million) were other important exports in this category.

In the 1970s Prague's major emphasis was to upgrade and modernize its machinery and transport industries. In the 1974–78 period, exports of these goods rose 8 percent annually. However, 1979 exports rose by nearly 26 percent. This was an encouraging sign for Czechoslovak planners, who count heavily on similar export expansions in the 1981–85 period to make up for drops in exports in other sectors.

Mineral fuels.—Exports of mineral fuels totaled $327 million in 1979—nearly 13 percent of Czechoslovak exports to the West. These exports surged 125 percent over the 1976–79 period—an unexpected development considering Czechoslovakia's past export trends and near total dependence on Soviet petroleum imports. Coal, coke and briquettes totalling $152 million and petroleum totalling near $100 million were major items in this category.

Exports of petroleum and its by-products should diminish in the 1981–85 period. Uncertain supplies and prices will most likely force the Czechoslovak Government to limit petroleum by-product exports. Soviet petroleum exports to Prague will at best stabilize at 19.2 million tons, while estimated Czechoslovak consumption could rise to 25 million tons by 1985. This would necessitate large hard currency expenditures for oil imports from OPEC.

Coal exports should also undergo a decline in this period. More expensive production processes yielding lower quality output, coupled with increasing domestic demand for this resource, would seem to preclude any export expansion.

B. OTHER EXPORT CAPABILITIES AND THE TERMS OF TRADE DIRECTION

In the 1980's Czechoslovakia will endeavor to recapture the strong edge in industrial productivity it had developed before World War II. Czechoslovakia hopes to enter and successfully compete in new fields such as microprocessors, computer parts, laser technology and electrical machinery. Hard currency earnings from these exports would bolster Czechoslovakia's trade balance with the West. Without this accomplishment, Czechoslovak terms of trade with the West will continue to deteriorate as costs for imports of raw materials, agricultural products and machinery rise at a faster pace than earnings from traditional Czechoslovak exports.

V. Czechoslovak Hard Currency Trade and Debt Outlook 1981–85

A. PROJECTED 1985 TRADE WITH THE INDUSTRIALIZED WEST

Czechoslovakia's trade in the next five years with the Industrialized West is heavily dependent upon five factors:

> Czechoslovakia will require imports of advanced Western machinery, equipment and high technology processes. If Czechoslovakia remains committed to limited eurocurrency borrowings to finance import needs, it must expand export earnings. This expansion will be difficult in light of Prague's increasing consumption of domestic resources as well as the shrinking availability of those resources. Thus, Czechoslovakia will have to increasingly rely on its engineering industry to provide increased export earnings.

Perceptions of the risk in lending to all CMEA countries have been complicated by the political and economic instability in Poland as well as the deterioration in Romania's ability to repay its hard currency debt. As a result, the CMEA borrowers are facing higher interest rates and shorter loan maturities than were available in the past. This cautious approach to lending to Eastern Europe could hamper Czechoslovakia's ability to borrow in the international credit markets in the 1980s. Diminished access to Western credit would hamper Czechoslovakia's ability to increase imports of Western products.

The Soviet Union cannot continue to supply Czechoslovakia with 95 percent of its oil needs. Prague is striving to improve industrial efficiency and productivity and increase utilization of domestic lignite in production processes. If successful, Czechoslovakia will not be forced to spend ever-increasing amounts of scarce hard currency for oil imports. However, if Czechoslovakia is forced to import 15–20 percent of its oil needs by 1985, then other vital imports will have to be curtailed.

Czechoslovakia must improve its capacity to provide goods to its CMEA trading partners. Too often in the late 1970's, Czechoslovakia was forced to divert its Western-bound exports to CMEA because of backlogs in scheduled deliveries to CMEA. Czechoslovakia's first trading priority is with CMEA, and those exports must be satisfied even at the expense of trade with the West.

In general, the Czechoslovak economy is entering a period of virtually no growth. The Government's ability to eradicate declining labor productivity, and growing shortfalls in key industrial sectors will ultimately determine the role of foreign trade in Czechoslovakia's overall economic plans.

Two scenarios have been constructed in order to project Czechoslovak trade with the Industrialized West (see table A–13.[2]).

Low-Range Estimate. This assumes a less optimistic scenario for Czechoslovak-Industrialized Western trade. Under these conditions export revenues would not expand sufficiently to allow substantial import growth. Large oil purchases from OPEC, not offset by increased hard currency exports, would further constrain imports from the Industrialized West. The Government's unwillingness (or inability should the syndicated loan market tighten) to utilize large additional bank credits to finance Western imports would place another burden on Czechoslovak-Industrialized Western trade. This restriction in growth of trade levels would force Prague to further integrate itself within CMEA and further slow economic growth potential.

High-Range Estimate. This assumes an optimistic scenario for Czechoslovak-Industrialized Western trade. Rising export revenues, primarily from engineering products, would permit higher import growth. Successful petroleum conservation combined with greater reliance on domestic energy resources would restrain growth of Czechoslovak oil import requirements from OPEC. Greater utilization of Western credits consistent with a well balanced repayment strategy could permit a more flexible import expansion and could improve Czechoslovak growth potential.

---

[2] Table A–13. represents an optimistic scenario for Czechoslovak-Industrialized Western trade by 1985. Exports will rise slightly more than imports although trade levels will increase at a slower pace than in the 1974–79 period.

B. PROJECTED 1983 AND 1985 HARD CURRENCY TRADE AND DEBT LEVELS UNDER VARIOUS ASSUMPTIONS (SEE TABLE A-14)

Two scenarios have been constructed in order to project Czechoslovak trade with the West by 1985. Under the first scenario, which extrapolates recent trade performance, Prague's exports will rise faster than imports, although not sufficiently to balance trade by 1985. Hard currency deficits and debt repayments will increase, but will remain manageable. Trade with developing nations and OPEC will rise substantially as Prague increases imports of oil and other mineral resources and seeks to balance this trade with more manufactured goods exports.

The second scenario is more pessimistic and takes into account Prague's stagnant economy and difficulty in expanding hard currency exports. Large import needs will necessitate a rising import growth rate. This will lead to higher hard currency deficits and larger debt repayments. Despite Czechoslovakia's acceptable borrowing strategy in the past, Western bankers will probably not be willing to finance unchecked hard currency trade deficits in this resource poor, energy dependent nation. A critical factor will be Prague's ability to expand exports to OPEC to offset oil imports.

VI. U.S.-CZECHOSLOVAKIA TRADE POTENTIAL UNDER NORMALIZED CONDITIONS

A. LEGISLATIVE CONSTRAINTS

U.S.-Czechoslovak trade has increased five-fold in the 1970–79 period. Currently Czechoslovakia does not receive most-favored-nation (MFN) tariff treatment and is not eligible for U.S. government credits or credit guarantees (i.e., CCC and Eximbank credits). Extension of MFN tariff treatment to Czechoslovakia must take place within the framework of the 1974 Trade Act (119 USC 2101 et. seq.), which provides the legislative authority for the granting of Most-Favored-Nation treatment to non-market economies. The provisions of Title IV of the Trade Act link extension of MFN tariff treatment to a country's emigration practices and provide that MFN be extended only as part of a bilateral trade agreement, which is limited to a three-year, renewable term.

Even if the U.S. and Czechoslovakia extended reciprocal MFN tariff treatment, Czechoslovakia is likely to run trade deficits with the U.S., especially in years it purchases large amounts of grain. MFN tariff treatment would make Czechoslovak manufactured goods exports somewhat more attractive by reducing tariff levels, however the overall impact on U.S.-Czechoslovak trade would be small.

B. POTENTIAL COMPOSITION AND VOLUME OF U.S. EXPORTS TO CZECHOSLOVAKIA UNDER NORMALIZED TRADING CONDITIONS

1. Agriculture/nonagriculture composition

Agricultural exports have consistently made up the largest share of total U.S. exports to Czechoslovakia. In 1979 they comprised 90 percent of total U.S. exports. U.S. nonagricultural exports to Prague have never played a very important role in U.S.-Czechoslovak trade as exports of these goods have comprised barely 10 percent of total U.S. exports to Prague.

2. *Prospects for U.S. agricultural exports*

The prospects for U.S. agricultural exports to Czechoslovakia remain good for the 1981–85 period. Czechoslovakia imported U.S. corn, wheat, and soy products in large quantities when domestic harvests have fallen short of plan. Czechoslovakia currently requires between 11 and 12 million metric tons of agricultural products for domestic consumption and maintenance of adequate livestock herds. These needs may rise slowly in the next five years if the Government endeavors to increase meat supplies.

The increase in U.S. agricultural exports to Czechoslovakia in th next five years depends upon two factors:

First, and most important, is the level of domestic grain production. Efforts are being undertaken to increase the use of pesticides, fertilizers, better quality seeds, and more advanced Western machinery to spur agricultural output. Successful implementation of these methods will be important to attaining the Government's goals. Good weather and improved labor productivity are essential to attain this goal.

Second, U.S. agricultural export potential is dependent upon the size of agricultural production in the U.S.S.R./EE. In past years the U.S.S.R. had been a major food exporter to Czechoslovakia. However, considering 3 successive years of poor grain harvest, the U.S.S.R. will most likely be unable to export food to Czechoslovakia. Therefore, U.S. agricultural exports to Prague will remain important if Czechoslovakia has poor harvests.

3. *Prospects for U.S. nonagricultural export items*

U.S. nonagricultural exports to Czechoslovakia fell into two categories: chemicals, and machinery and instrumentation. While these exports were valued at $20–30 million annually during the last five years, their quantity has been decreasing when inflation is taken into account. Among chemicals, the most important exports have been phosphoric acid and insecticides. Wire weaving machines, glass rods, and measuring have been the major machinery and instrumentation items.

Resolution of the gold claims issue with Czechoslovakia may improve bilateral trade. In the meantime, Czechoslovakia will continue to import basic chemicals and machinery from the United States, but the U.S. will continue to be a residual supplier. Czechoslovakia will also seek to import electronic data processing equipment, equipment for deep coal mining and mining infrastructure, equipment for the treatment and storage of high moisture grain, and more energy efficient industrial machinery.

C. POTENTIAL COMPOSITION AND VOLUME OF U.S. IMPORTS FROM CZECHOSLOVAKIA UNDER NORMALIZED CONDITIONS

In recent years almost 85 percent of all U.S. imports from Czechoslovakia have been manufactured goods. Leather footwear has consistently been the leading U.S. import, followed by glassware, canned hams, and weaving machines. The value of U.S. imports from Czechoslovakia have fluctuated between $50–60 million in the late 1970s; in terms of volume, however, they have fallen.

Czechoslovakia contends that extension of reciprocal MFN tariff treatment would enable it to boost exports to the U.S. They claim that U.S. importers of Czechoslovak goods must pay enormous tariffs, from three to six times higher than most-favored-nation duties. With the higher tariff rate, certain Czechoslovak goods are too expensive to compete effectively for a share of the U.S. market.

Should Czechoslovakia receive MFN tariff treatment some rise in U.S. purchases of Czechoslovak machinery and equipment could be expected, although this increase is likely to be tempered by the large amounts of energy needed to power these goods, Czechoslovakia's exports to the Industrialized West include coke, lumber and fruits. Since the U.S. is not a major importer of these products, it is unlikely that Czechoslovakia will be able to increase its share of the U.S. market. Other potential areas of Czechoslovak export strength, textiles, iron and steel and clothing are import sensitive sectors in the U.S. While MFN status would seem to enhance Czechoslovak export potential to the U.S.. the benefits would be modest.

The potential impact of Czechoslovak imports on sensitive U.S. industries is dependent upon the volume and price of those imports. Sizable clothing, textile and iron and steel imports could have a negative effect on these troubled U.S. industries, which already face strong foreign competition. If the market price of these imports is lower than the American price, anti-dumping clauses could be invoked. Recent U.S. anti-dumping actions against European and Japanese steel producers indicate that we may be entering a period of tightly enforced legislation to protect ailing industries.

D. GENERAL ASSESSMENT OF U.S.-CZECHOSLOVAK TRADE COMPLEMENTARITY

Drawing upon the above analysis, U.S.-Czechoslovak trade complementarity appears limited. Prospects for U.S. exports of foodstuffs will remain high at times when Czechoslovak harvests are poor. While U.S. exports of advanced machinery and technology are highly valued by Czechoslovakia's industries, lack of hard currency and large trade deficits with the U.S. rule out any major surge in this trade. Expansion of U.S. exports of consumer goods, chemicals, and iron and steel is not likely to occur because the Czechoslovak economy is entering a period of austerity with plans to curtail such imports.

Prospects for Czechoslovak exports are not bright. Without MFN status Czechoslovak Foreign Trade Organizations believe that penetration of the U.S. market would be an unprofitable venture. Even with MFN status, many potential Czechoslovak manufactured exports would still face European and LDC competition for a share of the U.S. market, as well as possible complications posed by the import of these sensitive U.S. industries. Additionally, Czechoslovakia's exports of machinery and equipment will have to become more energy efficient to compete successfully in the U.S.

VII. PROJECTED 1985 U.S.-CZECHOSLOVAK TRADE UNDER ALTERNATIVE SCENARIOS

Table A-15 offers two sets of estimates for projected U.S.-Czechoslovak trade in 1985—a low range estimate based on a continuation of past trade trends, and a high range estimate based on fully normalized trade relations, i.e., MFN trade status would be extended and CCC and Eximbank credits could be available to Czechoslovakia.

Total U.S. exports to Czechoslovakia in 1980 were $236 million, consisting chiefly of corn, soybean products, wheat, cattle hides, and some industrial products. Imports stood at $66 million, for a U.S. surplus of $170 million. By 1985 U.S. exports are expected to range from $135–$300 million and imports, from $70–$110 million, for a U.S. trade surplus of $60–$190 million.

Agricultural products, which accounted for nearly 80 percent of U.S. exports to Czechoslovakia in 1980, will continue to be the primary U.S. export category by 1985, although again, the volume and composition of exports are likely to fluctuate, depending on Czechoslovak harvests. Corn, soybean oilcake, and wheat will continue as the chief U.S. agricultural exports.

Machinery and transport equipment valued at $13.8 million accounted for 5.8 percent of U.S. exports to Czechoslovakia in 1980. Growth potential exists for this category. Manufactured exports may range from $30–$75 million by 1985, with advanced machine tools and instruments taking a major share. The state of bilateral relations will determine which end of the range actual 1985 exports will reach.

In recent years almost 85 percent of all U.S. imports from Czechoslovakia were manufactured goods, led by leather footwear, glassware, and weaving machines. This pattern will probably be maintained over the next four years.

APPENDIX

TABLE A-1.—CZECHOSLOVAK FOREIGN TRADE BY MAJOR TRADING GROUPS 1960–79

[Dollar amounts in millions of U.S. dollars]

	1960		1970		1974		1978		1979	
	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
Imports	$1, 016		$3, 695		$7, 352		$12, 210		$14, 171	
Of which:										
U.S.S.R	630	34. 7	1, 209	32. 7	1, 979	26. 9	4, 381	35. 9	5, 131	35. 7
East Europe	524	28. 9	1, 123	30. 4	2, 281	31. 0	1, 925	32. 1	4, 400	30. 6
Developed countries	360	19. 8	917	24. 8	2, 102	28. 6	2, 810	21. 2	3, 340	23. 2
Less developed countries	161	8. 9	214	5. 8	535	7. 3	579	4. 7	701	4. 9
Exports	1, 929		3, 792		6, 884		11, 494		13, 890	
Of which:										
U.S.S.R	659	34. 2	1, 222	32. 2	2, 023	29. 4	3, 959	34. 4	4, 792	34. 5
East Europe	561	29. 1	1, 213	32. 0	2, 109	30. 6	3, 810	33. 1	4, 072	29. 3
Developed countries	335	17. 4	783	20. 6	1, 702	24. 7	2, 172	18. 9	2, 851	20. 5
Less developed countries	200	10. 4	331	8. 7	599	8. 7	907	7. 9	1, 277	9. 2

Source: CIA, Handbook of Economic Statistics, (ER 79–10274), August 1979.

TABLE A-2.—CZECHOSLOVAK TRADE WITH THE WEST[1] 1970–79

[In millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	Average annual growth rate 1974–79
Imports	1, 131	2, 637	2, 745	2, 927	3, 373	3, 409	4, 041	23. 6
Exports	1, 114	2, 301	2, 379	2, 329	2, 745	3, 079	4, 128	24. 4
Trade turnover	2, 245	4, 938	5, 124	5, 256	6, 118	6, 488	8, 169	24. 0
Balance	−17	−336	−366	−598	−628	−330	87	

[1] Includes soft currency trade.

Source: CIA, Handbook of Economic Statistics, August 1980.

TABLE A-3.—U.S. CZECHOSLOVAK TRADE, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
U.S. exports	48. 6	52. 9	242. 5	138. 5	106. 4	305. 6
Of which:						
Agricultural	30. 5	35. 2	219. 5	108. 2	78. 1	272. 5
Manufactured[1]	17. 4	16. 2	22. 0	28. 4	26. 3	30. 9
Other	. 7	1. 5	1. 0	1. 9	2. 0	2. 2
U.S. imports	45. 6	34. 6	36. 4	36. 6	58. 0	50. 9
Of which:						
Agricultural	2. 6	1. 9	4. 0	5. 4	6. 2	7. 8
Manufactured[1]	42. 7	32. 1	31. 5	30. 6	51. 6	42. 8
Other	. 3	. 6	. 8	. 6	. 2	. 4
Trade turnover	94. 2	87. 5	278. 9	175. 1	164. 4	356. 5
Balance	+3. 0	+18. 3	+206. 1	+101. 9	+48. 4	+254. 7

[1] SITC 5-8.

Source: U.S. Government.

TABLE A-4.—CZECHOSLOVAKIA: HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1971	1975	1976	1977	1978	1979
Commercial debt	284	926	1,575	2,290	2,798	3,550
Of which:						
Owed to U.S. banks	(1)	(1)	(1)	193	173	231
Officially backed debt	201	206	287	326	408	470
Of which:						
Guaranteed export credits	201	206	287	326	408	470
U.S. Eximbank						
CCC credits						
Gross debt	485	1,132	1,862	2,616	3,206	4,020
Commercial assets	325	305	428	498	593	950
Net debt	160	827	1,434	2,121	2,513	3,070

[1] Not available.

Source: U.S. Government.

TABLE A-5.—CZECHOSLOVAK TRADE WITH THE INDUSTRIALIZED WEST (IW) AND UNITED STATES, 1974-79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Imports from IW	1,643.2	1,788.7	1,987.2	1,974.9	2,194.6	2,592.0
United States	48.6	52.9	148.3	74.0	105.3	281.1
U.S. share	3.0	3.0	7.5	3.7	4.8	10.8
European Community	1,189.4	1,256.3	1,383.7	1,410.0	1,549.2	1,753.0
European Community share	72.4	70.2	69.6	71.4	70.6	67.6
Of which:						
Foodstuffs[1]	150.2	105.9	199.0	125.4	148.3	325.6
United States	18.4	56.5	105.1	30.4	58.5	212.5
U.S. share	12.3	53.3	52.8	28.9	39.4	65.3
European Community	115.1	65.0	63.9	76.6	67.9	90.6
European Community share	76.6	61.4	32.1	61.1	45.8	27.8
Manufactured[2]	1,317.4	1,507.1	1,607.2	1,642.7	1,839.3	2,006.3
United States	17.4	16.2	22.8	18.4	26.3	30.9
U.S. share	.1	.1	.1	.1	.1	.2
European Community	975.0	1,346.1	1,221.0	1,214.4	1,355.6	1,503.2
European Community share	74.0	89.3	76.0	73.9	73.7	74.9
High technology	210.2	268.1	274.7	286.5	357.1	354.8
United States	9.6	7.7	9.7	7.5	10.9	9.0
U.S. share	4.6	2.9	3.5	2.6	3.1	2.5
European Community	146.1	181.6	190.7	198.7	249.5	245.3
European Community share	69.5	67.7	69.4	69.4	69.9	69.1
Exports to IW	1,434.9	1,530.1	1,587.5	1,746.3	2,022.7	2,547.4
United States	45.6	34.6	36.4	36.6	64.7	56.5
U.S. share	3.2	2.3	2.3	2.1	3.2	2.2
European Community	937.3	1,020.6	1,102.0	1,219.7	1,398.0	1,765.8
European Community share	65.3	66.7	69.4	69.8	69.1	69.3
Trade turnover with IW	3,078.1	3,318.8	3,574.7	3,721.2	4,217.3	5,139.4
Balance	−208.3	−258.6	−399.7	−228.6	−171.9	−44.6
Balance with United States	−3.0	−18.3	−111.9	−37.4	−40.6	−224.6
Balance with European Community	−252.1	−235.7	−281.7	190.3	−151.2	+12.8

[1] SITC 0, 1, 4.
[2] SITC 5-8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF CZECHOSLOVAK IMPORTS FROM THE INDUSTRIALIZED WEST, 1974-79

[Millions of U.S. dollars, except percent]

	1974	1975	1976	1977	1978	1979	Percent of 1979 total	Average annual growth rate 1979 (percent)
Imports from IW	1,643.2	1,788.7	1,987.2	1,974.9	2,194.6	2,592.0		9.5
Foodstuffs (SITC 0, 1, 4)	150.2	106.0	198.9	125.3	148.2	325.6	12.6	16.7
Cereals	14.0	8.0	85.9	13.9	60.4	192.2		
Feeding-stuff for animals	69.0	22.8	36.3	23.8	14.5	47.1		
Crude materials (SITC 2)	137.8	130.1	133.4	155.1	150.0	200.5	7.7	7.8
Hides, skins, fur skins	22.3	18.3	29.5	33.4	36.0	66.8		
Textile fibers	24.2	22.0	22.7	27.2	26.1	30.5		
Crude rubber	18.4	17.0	19.8	20.2	22.8	28.2		
Metalliferous ores	17.4	24.6	15.1	19.0	21.3	24.4		
Mineral fuels (SITC 3)	21.8	26.8	23.4	23.9	32.4	34.3	1.3	9.4
Petroleum and byproducts	17.7	22.5	18.5	23.6	30.9	30.6		
Chemicals (SITC 6)	357.1	374.4	360.4	376.0	403.6	525.8	20.3	8.0
Chemical elements, compounds	126.1	147.5	135.4	146.6	168.5	241.4		
Plastic materials	117.0	97.7	90.2	89.2	85.5	104.2		
Chemical, n.e.s	46.3	57.3	60.0	60.3	59.3	67.2		
Dyes, tanning, color products	36.8	37.0	39.3	45.1	49.0	61.5		
Basic industrial goods (SITC 6)	288.8	324.0	424.9	353.4	376.1	444.7	17.2	9.0
Iron and steel	54.0	79.1	168.9	88.0	116.7	165.9		
Nonferrous metals	36.2	45.5	47.5	37.9	55.2	66.0		
Textile yarn	88.8	71.1	67.1	70.0	63.3	65.7		
Metal manufacturers, n.e.s	39.6	47.4	58.9	65.7	59.1	61.9		
Nonmetal mineral MFS, n.e.s	17.2	21.6	25.8	30.6	29.1	31.0		
Machinery and transportation equipment (SITC 7)	566.4	687.6	703.5	785.1	927.3	897.0	34.6	9.6
Machinery nonelectric	418.6	513.2	516.1	590.0	699.0	653.8		
Electrical machinery	108.5	129.6	143.8	147.0	175.4	188.3		
Transport equipment	39.3	44.7	43.5	47.2	52.9	54.8		
Miscellaneous manufactured goods (SITC 8)	105.1	121.2	118.5	128.1	132.3	138.9	5.4	5.7
Instruments watches, clocks	36.7	44.2	46.7	45.8	50.7	57.8		
Miscellaneous manufactured goods, n.e.s	31.4	39.1	35.8	44.0	45.6	46.1		
Other	15.9	18.7	22.2	27.9	24.6	25.3	.1	9.7

Source: U.N. trade data, magnetic tapes.

TABLE A-7.—LEADING CZECHOSLOVAK IMPORTS FROM THE INDUSTRIALIZED WEST

[Dollar amounts in thousands of U.S. dollars]

SITC	Description	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Machinery, nonelectric	1	$650,016	25.2		$690,994	31.9		$590,949	29.9	
51	Chemical elements, compounds	2	241,405	9.3		160,500	7.7		146,647	7.4	
04	Cereals and cereal preparations	3	192,219	7.4		60,350	2.7		13,862	.7	
72	Electrical machinery	4	100,207	7.1		175,351	0		146,960	7.4	
67	Iron and steel	5	165,924	6.0	55.6	116,699	5.3	55.6	87,960	4.5	49.9
50	Plastic materials, etc	6	104,150	4.0		85,515	3.9		89,179	4.5	
59	Chemicals, n.e.s	7	67,145	2.6		59,291	2.7		60,274	3.1	
21	Hides and skins, undressed	8	66,701	2.6		35,955	1.6		33,366	1.7	
60	Nonferrous metals	9	65,972	2.5		65,152	2.5		37,059	1.9	
65	Textile yarn, fabric, etc	10	65,694	2.5	69.9	63,209	2.9	69.2	70,039	3.5	64.7
	5-DIGIT SITC AGGREGATES										
0410	Wheat (includes spelt) and meslin, unmilled	1	93,078	3.6		3,159	.1		289	0	
0440	Maize (corn) unmilled	2	90,416	3.5		44,999	2.1		10,843	.5	
7151	Machine tools for metal	3	81,972	3.2		75,492	3.4		53,158	2.7	
6700	Iron, steel tubes, pipe, n.e.s	4	77,210	3.0		46,842	2.1		5,254	.3	
7190	Other machines, nonelectric	5	66,162	2.6	15.8	68,427	3.1	10.9	80,406	4.1	7.6
2111	Bovine and equivalent hides other than calf and kip	6	62,154	2.4		33,822	1.5		29,411	1.5	
5012	Products of polymerizing, etc	7	49,540	1.9		38,291	1.7		50,444	2.6	
0013	Oil-seed cake and meal	8	42,043	1.7		10,746	.5		18,800	1.0	
5811	Products of condensation, etc	9	30,940	1.5		30,961	1.4		30,391	1.5	
71931	Lifting, loading machines	10	35,372	1.4	24.6	49,822	2.3	18.3	31,679	1.6	15.7
72952	Electrical measuring control equipment n.e.s	11	32,792	1.3		31,190	1.4		26,931	1.4	
72996	Electrical carbons	12	30,501	1.2		14,746	.7		14,617	.7	
6704	Steel high pressure conduit	13	29,340	1.1		19,400	.9		30,619	1.8	
2312	Synthetic rubber and rubber substitutes	14	28,091	1.1		22,614	1.0		19,909	1.0	
63101	Synthetic organic dye, natural indigo	15	27,060	1.1	30.3	22,700	1.0	23.4	21,554	1.1	21.5
50999	Other chemical products, preparation, n.e.s	16	27,500	1.1		22,307	1.0		22,530	1.1	
71042	Excavating, levelling, etc., machinery	17	23,932	.9		17,705	0		20,300	1.0	
71992	Cock, valves, etc., n.e.s	18	22,692	.9		22,774	1.0		21,362	1.1	
71715	Refrigeration equipment, nondomestic	19	22,394	.9		15,762	.7		17,050	.9	
71919	Heating, cooling equipment, n.e.s	20	20,930	0	34.0	36,077	1.0	20.0	27,925	1.4	27.0
60221	Copper bars, wire, etc	21	20,710	0		17,335	0		8,940	.5	
7222	Switchgear, etc	22	20,525	0		17,261	0		14,100	.7	
61212	Hydrocarbs, excludes styrene	23	19,244	.7		8,913	.4		4,070	.2	
51205	Heterocyclic compounds, etc	24	19,202	.7		14,206	0		13,347	.7	
7231	Electric power machinery	25	19,055	.7	38.7	10,423	.5	31.7	11,060	0	20.0

TABLE A-8.—ORIGINS OF LEADING CZECHOSLOVAK IMPORTS FROM INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

1979 item rank	SITC	Description: Origin	1979 Origin rank	1979 Value	1979 Item/origin percent of total	1977 Origin rank	1977 Value	1977 Item/origin percent of total
1	71	Machinery, nonelectric		$653.0	25.2		$509.9	29.9
		Federal Republic of Germany	1	335.0	51.2	1	317.8	53.8
		Austria	2	70.8	10.8	2	73.9	12.5
		Switzerland	3	44.0	6.7	3	40.0	6.7
		United States	13	7.4	1.1	13	8.1	1.4
		European Community		471.0	72.0		427.8	72.4
2	51	Chemical elements, compounds		241.4	9.3		168.5	7.4
		Federal Republic of Germany	1	118.0	48.9	1	75.0	51.2
		France	2	25.4	10.5	2	15.2	10.4
		Netherland	3	19.7	8.2	3	11.3	7.7
		United States	13	1.7	.7	13	1.2	0
		European Community		201.9	83.6		124.1	73.6
3	04	Cereals and cereal preparations		192.2	7.4		13.9	.7
		United States	1	167.2	87.0	1	8.9	64.5
		Federal Republic of Germany	2	16.8	8.7	2	2.1	15.4
		Italy	3	3.6	1.9	3	1.3	9.1
		European Community		22.2	11.6		4.1	29.5
4	72	Electrical machinery		188.3	7.3		147.0	7.4
		Federal Republic of Germany	1	74.6	39.6	1	58.1	36.2
		Austria	2	18.7	9.9	2	16.9	11.5
		Switzerland	3	17.1	9.1	3	12.1	8.2
		United States	9	4.2	2.2	13	2.2	1.5
		European Community		118.8	63.1		93.5	63.6
5	67	Iron and steel		165.9	6.4		88.0	4.5
		Federal Republic of Germany	1	130.6	78.7	1	56.0	63.7
		Austria	2	14.2	8.5	2	14.4	16.4
		Sweden	3	7.6	4.6	3	8.3	9.4
		United States	16	(1)	0	15	.1	.1
		European Community		142.7	86.0		63.2	71.8

[1] Negligible.

Source: U.N. trade data, magnetic tapes.

TABLE A-9.—INDUSTRALIZED WEST (IW) EXPORT TRADE SHARES TO CZECHOSLOVAKIA, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, Total	$1,643,156	100.0	$1,788,675	100.0	$1,987,196	100.0	$1,974,901	100.0	$2,194,573	100.0	$2,592,003	100.0	$12,180,504	100.0
Belgium-Luxembourg	50,925	3.1	62,595	3.5	59,140	3.0	74,293	3.8	69,373	3.2	74,456	2.9	390,782	3.2
Denmark	26,260	1.6	29,163	1.6	31,906	1.6	27,650	1.4	24,010	1.1	24,817	1.0	163,814	1.3
Federal Republic of Germany	691,108	42.1	679,926	38.0	806,952	40.6	848,056	42.9	913,507	41.6	1,080,930	41.9	5,026,567	41.3
France	105,054	6.4	150,929	8.9	161,741	8.1	142,431	6.3	142,110	6.5	151,407	5.8	843,672	6.9
Ireland	1,394	.1	1,478	.1	662	0	1,341	.1	1,961	.1	1,700	.1	8,612	.1
Italy	123,593	7.5	121,671	6.8	113,010	5.7	124,261	6.3	150,243	6.0	154,344	6.0	787,122	6.4
The Netherlands	86,523	5.3	90,225	5.0	102,485	5.2	96,154	4.9	107,453	4.9	102,285	3.9	585,125	4.8
United Kingdom	104,545	6.4	112,306	6.3	107,835	5.4	113,836	5.8	140,447	6.4	156,941	6.1	735,911	6.0
European Community subtotal	1,189,402	----------	1,256,293	----------	1,383,732	----------	1,410,030	----------	1,549,184	----------	1,752,968	----------	8,541,609	----------
Austria	154,207	9.4	190,918	10.7	178,829	9.0	213,317	10.8	221,567	10.1	216,789	8.4	1,175,627	9.6
Canada	23,496	1.4	9,900	.6	17,897	.9	14,136	.7	11,184	.5	30,989	1.2	107,505	.8
Finland	28,320	1.5	30,203	1.7	36,330	1.8	30,460	1.5	37,800	1.7	31.132	1.2	194,759	1.6
Japan	41,724	2.5	44,765	2.5	30,071	1.5	35,011	1.8	30,265	1.4	38,591	1.5	220,427	1.8
Norway	17,718	1.1	23,206	1.3	21,332	1.1	22,125	1.1	20,673	.9	19,215	.7	124,267	1.0
Sweden	62,486	3.8	75,268	4.2	66,787	3.4	70,514	3.6	93,570	4.4	96,340	3.7	467,995	3.8
Switzerland	81,695	5.0	105,210	5.9	103,915	5.2	105,281	6.3	122,481	5.6	124,939	4.8	643,529	5.3
United States	40,604	3.0	52,904	3.0	148,303	7.5	73,989	3.7	106,349	4.8	281,131	10.8	710,280	5.8

Source: U.N. trade data, magnetic tapes.

TABLE A-10.—COMPOSITION OF CZECHOSLOVAK EXPORTS TO THE INDUSTRIALIZED WEST, 1974-79

[Millions of U.S. dollars, except percent]

	1974	1975	1976	1977	1978	1979	Percent of 1979 total	Average annual growth rate, 1979-80 (percent)
Exports to IW	1,434.9	1,530.1	1,587.5	1,746.3	2,022.7	2,347.4		12.2
Foodstuffs (SITC 0, 1, 4)	112.1	130.4	108.2	126.0	155.6	193.0	7.6	11.5
Meat and meat preparations	20.8	22.7	17.1	31.9	48.4	69.3		
Fruit and vegetables	28.6	31.3	31.8	34.0	40.7	53.1		
Crude materials (SITC 2)	191.9	167.1	191.6	231.5	278.9	353.1	13.9	13.0
Wood, lumber and cork	124.4	104.7	119.1	157.3	196.0	243.0		
Crude fertilizers and minerals	21.5	22.7	23.0	25.4	30.0	35.8		
Metalliferrous ores and scrap	14.1	12.1	18.6	15.8	20.4	32.7		
Mineral fuels (SITC 3)	136.1	207.4	205.4	183.6	213.3	326.8	12.8	19.1
Petroleum and byproducts	40.1	64.3	71.3	57.0	66.7	158.9		
Coal, coke, briquettes	91.3	137.3	125.0	115.5	135.1	152.2		
Chemicals (SITC 5)	123.7	102.2	103.7	129.3	133.0	195.0	7.7	9.5
Chemical elements, compounds	77.7	63.4	57.4	66.8	67.6	99.1		
Plastic meterials, etc	9.7	8.0	10.1	17.5	28.6	51.4		
Basic industrial goods (SITC 6)	438.1	418.5	473.5	525.8	628.8	751.9	29.5	11.4
Iron and steel	200.7	176.3	20[illegible].0	217.4	270.5	325.0		
Textile yarn, fabric, etc	98.1	98.4	101.7	111.7	131.4	155.3		
Nonmetal mineral MFS, n.e.s	61.7	66.6	69.1	80.5	95.1	113.7		
Nonferrous metals	14.0	12.2	14.5	25.6	31.4	36.4		
Machinery and transportation equipment (SITC 7)	197.6	251.1	240.0	250.9	268.3	336.6	13.2	11.2
Machinery, nonelectric	119.0	153.1	144.1	138.2	154.2	200.6		
Transport equipment	44.1	63.5	56.0	56.3	63.2	75.9		
Electrical machinery	34.4	34.5	39.9	46.4	50.8	60.1		
Miscellaneous manufactured goods (SITC 8)	207.9	229.1	235.8	270.1	308.6	355.3	13.9	11.3
Clothing	71.6	80.4	84.1	97.1	116.1	128.5		
Miscellaneous manufactured goods, n.o.s	48.7	55.8	54.2	58.9	68.4	76.8		
Footwear	42.0	41.0	41.8	50.0	48.0	61.8		
Furniture	18.3	21.7	23.6	28.3	37.7	44.8		
Other	17.3	24.3	27.8	29.1	36.2	35.7	1.4	15.6

Source: U.N. trade data, magnetic tapes.

TABLE A-11.—LEADING CZECHOSLOVAK EXPORTS TO THE INDUSTRIALIZED WEST

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1970 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
67	Iron, steel	1	$325,046	12.8		$270,510	13.4		$217,413	12.4	
24	Wood lumber and cork	2	242,976	9.5		195,955	9.7		157,251	9.0	
71	Machinery, nonelectric	3	200,664	7.9		154,219	7.6		130,200	7.9	
33	Petroleum and petroleum products	4	158,875	6.2		66,722	3.3		57,010	3.3	
65	Textile yarn, fabric, etc	5	155,315	6.1	42.5	131,359	6.5	40.5	111,656	6.4	39.0
32	Coal, coke, and briquettes	6	152,169	6.0		135,138	6.7		115,500	6.6	
04	Clothing	7	128,606	5.0		116,102	5.7		97,062	6.6	
66	Nonmetal mineral, manufacturer, n.e.s	8	113,660	4.5		95,100	4.7		80,465	4.6	
51	Chemical elements, compounds	9	99,094	3.9		67,570	3.3		66,030	3.0	
89	Miscellaneous manufactured goods, n.e.s	10	76,776	3.0	64.9	68,442	3.4	64.3	50,920	3.4	83.0
	5-DIGIT SITC AGGREGATES										
24321	Lumber, sawn lengthwise, etc., conifer	1	103,105	4.0		83,157	4.1		72,115	4.1	
3323	Distillate fuels	2	79,627	3.1		34,110	1.7		23,321	1.3	
3214	Coal	3	72,768	2.0		64,070	3.2		53,005	3.0	
7151	Machine tools for metal	4	63,639	2.5		45,141	2.2		36,534	2.1	
67411	Iron, simple steel heavy plate	5	58,885	2.3	14.8	40,166	2.4	13.8	43,159	2.5	13.1
3321	Motor spirit	6	55,663	2.2		23,169	1.1		17,557	1.0	
05102	Footwear leather	7	53,437	2.1		42,302	2.1		43,735	2.5	
24221	Sawlogs and veneer logs, rough, conifer	8	52,073	2.0		37,754	1.9		26,391	1.5	
3210	Coke and semi-coke of coal, lignite or peat	9	50,726	2.0		45,938	2.3		40,425	2.3	
67311	Iron, simple steel wire rod	10	48,953	1.9	25.1	47,865	2.4	23.4	39,242	2.2	22.0
7321	Passenger motor vehicles excludes buses	11	48,103	1.9		37,637	1.9		41,736	2.4	
7125	Tractors, nonroad	12	47,543	1.9		38,922	1.9		41,009	2.3	
84111	Mens outerwear, nonknit	13	41,077	1.6		39,498	2.0		32,301	1.9	
2421	Pulpwood	14	38,602	1.5		32,305	1.6		26,339	1.6	
6652	Household, hotel, etc., glass	15	37,950	1.5	33.5	31,834	1.6	32.3	21,670	1.2	32.0
67431	Iron, simple steel, thin uncrated	16	37,920	1.5		31,402	1.6		30,238	1.7	
5812	Products of polymerizing etc	17	35,119	1.4		19,204	.9		13,819	0	
51212	Hydrocarbons, excludes styrene	18	31,020	1.2		17,964	0		23,368	1.3	
0111	Meat of bovine animals, fresh, chilled	19	30,122	1.2		16,732	0		9,078	.5	
65229	Blanched cotton fabric, n.e.s	20	30,064	1.2	39.0	25,713	1.3	37.0	25,891	1.5	37.9
3216	Lignite briquettes	21	20,672	1.1		24,309	1.2		22,088	1.3	
06404	Hops	22	20,554	1.1		16,005	0		14,454	0	
7221	Electric power machinery	23	20,354	1.1		21,449	1.1		21,822	1.2	
0402	Malt	24	26,579	1.0		25,085	1.2		26,498	1.8	
02109	Furniture, parts n.e.s	25	26,055	1.0	45.3	22,395	1.1	43.2	16,202	.9	43.8

Source: U.N. trade data, magnetic tapes.

TABLE A-12.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM CZECHOSLOVAKIA, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		[illegible]8		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$1,431,070	100.0	$1,530,120	100.0	$1,587,491	100.0	$1,746,302	100.0	$2,022,678	100.0	$2,547,442	100.0	$10,868,917	100.0
Belgium-Luxembourg	54,495	3.8	50,221	3.3	51,531	3.2	48,387	2.8	58,736	2.9	66,460	2.6	329,830	3.0
Denmark	38,760	2.7	40,574	2.7	50,193	3.2	45,300	2.6	49,024	2.4	55,513	2.2	279,364	2.6
Federal Republic of Germany	401,950	20.0	469,757	30.7	505,023	31.9	562,731	32.2	679,397	33.6	876,527	34.4	3,496,225	32.2
France	87,605	6.1	104,407	6.8	108,397	6.8	129,333	7.4	140,863	7.0	167,075	6.6	737,760	6.8
Ireland	10,487	.7	11,529	0	11,202	.7	14,148	.8	18,761	.9	15,900	.6	82,027	.8
Italy	140,040	9.8	126,557	8.3	150,337	9.5	157,070	9.0	161,044	8.0	233,606	9.2	969,368	8.9
Netherlands	78,670	5.5	85,503	5.6	98,567	6.2	112,339	6.4	124,810	6.2	145,360	5.7	645,657	5.9
United Kingdom	125,154	8.7	131,652	8.6	126,063	7.9	150,373	8.6	164,500	8.1	205,391	8.1	903,221	8.3
European Community subtotal	837,297	----------	1,020,600	----------	1,102,013	----------	1,215,681	----------	1,398,023	----------	1,765,832	----------	7,443,446	----------
Austria	165,770	11.6	191,460	12.5	173,219	10.9	199,047	11.4	243,071	12.0	321,515	12.6	1,294,098	11.9
Canada	63,220	4.4	45,654	3.0	41,250	2.6	40,512	2.3	47,137	2.3	57,655	2.3	295,476	2.7
Finland	23,219	1.6	31,154	2.0	35,288	2.2	33,510	1.9	39,651	2.0	56,171	2.2	218,993	2.0
Japan	33,257	2.3	25,778	1.7	30,767	1.9	45,563	2.6	49,369	2.4	59,932	2.4	244,663	2.3
Norway	32,216	2.2	37,577	2.5	29,826	1.9	30,530	1.7	34,322	1.7	36,388	1.4	200,659	1.8
Sweden	60,022	4.2	77,109	6.0	77,795	4.9	70,978	4.1	77,525	3.8	93,500	3.7	457,817	4.2
Switzerland	73,499	5.1	66,077	4.3	60,917	3.8	69,882	4.0	68,911	3.4	99,927	3.9	439,213	4.0
United States	45,562	3.2	34,629	2.3	36,378	2.3	36,599	2.1	64,669	3.2	56,514	2.2	274,349	4.5

Source. U.N. trade data, magnetic tapes.

TABLE A-13.—PROJECTED 1985 CZECHOSLOVAKIAN TRADE WITH THE INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

	1979		Projected 1985		Projected average annual growth rate 1980–85 (percent)
	Amount	Percent of total	Amount	Percent of total	
Imports from industrialized west	$2,592.0	100.0	$4,113	----------	8.0
Foodstuffs (SITC 0, 1, 4)	325.6	12.6	490	11.5	7.0
Crude materials (SITC 2)	200.5	7.7	317	7.4	7.9
Mineral fuels (SITC 3)	34.3	1.3	54	1.3	7.9
Chemicals (SITC 5)	525.8	20.3	790	19.2	7.0
Basic industrial goods (SITC 6)	444.7	17.2	711	17.3	8.1
Machinery and transport equipment (SITC 7)	897.0	34.6	1,547	37.6	9.5
Miscellaneous manufactured goods (SITC 8)	138.9	5.4	194	4.7	5.7
Other (SITC 9)	25.3	.1	41	.1	8.6
Exports to industrialized West	2,547.4	100.0	4,156	----------	8.5
Foodstuffs (SITC 0, 1, 4)	193.0	7.6	320	7.7	8.8
Crude materials (SITC 2)	353.1	13.9	569	13.7	8.3
Mineral fuels (SITC 3)	326.8	12.8	465	11.2	6.1
Chemicals (SITC 5)	195.0	7.7	312	7.5	8.1
Basic industrial goods (SITC 6)	751.9	29.5	1,226	29.5	8.5
Machinery and transport equipment (SITC 7)	336.6	13.2	628	15.1	11.0
Miscellaneous manufactured goods (SITC 8)	355.3	13.9	556	13.6	7.7
Other (SITC 9)	35.7	1.4	71	1.7	12.1
Trade turnover	5,139.4	----------	8,269	----------	----------
Balance	−44.6	----------	+43	----------	----------

Source: U.S. Government.

TABLE A-14.—PROJECTED END-1983 AND END-1985 HARD CURRENCY TRADE AND DEBT LEVELS UNDER SELECTED TRADE GROWTH AND INTEREST RATE ASSUMPTIONS

	Assumptions				End year amounts (billions of dollars)					
Year	X growth rate	M growth rate	Interest rate	Balancing export growth rate	Exports	Imports	Trade balances	Interest	Debt	Debt to export ratio
1983	12.6	11.4	10	----------	6,139	6,498	(359)	419	4,854	0.79
	12.6	11.4	12	----------	6,139	6,498	(359)	520	5,093	.83
	----------	11.4	10	15.01	6,543	6,498	45	384	4,063	.62
	----------	11.4	12	15.38	6,604	6,498	106	471	4,172	.63
1985	12.6	11.4	10	----------	7,783	8,064	(280)	555	6,262	.80
	12.6	11.4	12	----------	7,783	8,064	(280)	709	6,782	.87
	----------	11.4	10	13.85	8,224	8,064	160	479	4,989	.61
	----------	11.4	12	14.10	8,316	8,064	253	598	5,208	.63
1983	8.6	9.2	10	----------	5,508	6,120	(613)	442	5,358	.97
	8.6	9.2	12	----------	5,508	6,120	(613)	547	5,603	1.02
	----------	9.2	10	12.82	6,175	6,120	55	382	4,028	.65
	----------	9.2	12	13.20	6,237	6,120	117	468	4,134	.66
1965	8.6	9.2	10	----------	6,496	7,298	(803)	648	7,808	1.20
	8.6	9.2	12	----------	6,496	7,298	(803)	823	8,365	1.29
	----------	9.2	10	11.67	7,468	7,298	170	471	4,095	.66
	----------	9.2	12	11.95	7,560	7,298	262	588	5,105	.68

Source: U.S. Government.

TABLE A-15.—PROJECTED 1985 UNITED STATES-CZECHOSLOVAK TRADE

[In millions of U.S. dollars]

	1979	1980	1981	Projected 1985 Low-range estimate	Projected 1985 High-range estimate
U.S. exports	305.6	236.0	92.8	134	301
Foodstuffs (SITC 0, 1, 4)	223.3	195.6	58.2	65	153
Crude materials (SITC 2)	50.0	11.2	11.6	30	35
Mineral fuels (SITC 3)	(1)	(1)	(1)	0	10
Chemicals (SITC 5)	13.4	3.7	2.2	5	5
Basic industrial goods (SITC 6)	2.8	4.3	3.4	5	10
Machinery and transport equipment (SITC 7)	10.0	13.8	11.5	20	75
Miscellaneous manufactured goods (SITC 8)	4.8	5.7	5.4	7	10
Other (SITC 9)	1.3	1.1	.6	2	3
U.S. imports	50.9	65.9	67.2	73	108
Foodstuffs (SITC 0, 1, 4)	7.1	9.9	10.8	10	11
Crude materials (SITC 2)	.7	.4	1.3	1	1
Mineral fuels (SITC 3)	0	0	0	0	0
Chemicals (SITC 5)	1.2	1.5	1.5	2	1
Basic industrial goods (SITC 6)	14.3	14.2	22.4	20	22
Machinery and transport equipment (SITC 7)	13.0	18.9	14.1	20	40
Miscellaneous manufactured goods (SITC 8)	14.2	20.5	16.7	19	32
Other (SITC 9)	.4	.5	.4	1	1
Trade turnover	356.5	301.9	160.0	207	409
Balance	+254.7	+170.1	+25.6	+61	+193

[1] Negligible.

Source: U.S. Government.

CUBA FACES THE ECONOMIC REALITIES OF THE 1980's

By Lawrence H. Theriot

EXECUTIVE SUMMARY

The Cuban revolution has managed social achievements, especially in education and health care, that are highly respected in the Third World. However, the Castro regime has also burdened Cuba with a highly inefficient political and economic management system (basically the Soviet model) that is perpetuating serious problems.

In some areas, Castro's social successes have themselves generated growing economic problems. For example, the Cuban economy is increasingly incapable of producing jobs for the relatively well-educated, rapidly growing labor force.

Cuba's social successes have been possible only because of massive economic assistance provided by the Soviet Union, with the result that Cuba now relies on the U.S.S.R. and other members of CMEA for three-fourths of its world trade.

Notwithstanding its overwhelming trade dependence on CMEA, Cuba must continue to rely on Western export markets, especially for sugar, to generate hard currency to pay for the 20–30 percent of its imports obtained from the West. Noncommunist countries are still the only source for some major products, as well as the preferred source (given sufficient hard currency) for most of Cuba's imports.

The twenty-year-old U.S. embargo has narrowly restricted Cuban gains from hard currency trade, both directly by foreclosing trade with Havana's natural partner, and indirectly by preventing trade with the West from achieving full potential. It has also forced dependence on distant CMEA suppliers whose unreliable delivery of a limited variety of generally poor quality products has retarded Cuban economic performance. Consequently, after a decade of integration into CMEA, the basic structure of the Cuban economy is unchanged and dependence on sugar has increased compared to pre-revolution levels. Perhaps most important, Havana must rely on subsidized Soviet imports for 98 percent of its oil needs.

During Cuba's first five year plan (1976–80), production in most key sectors fell far short of planned goals. Underemployment is rampant and labor productivity dismal largely because the revolution's key goal of economic equality has actually perpetuated an equalitarian austerity that offers workers little motivation.

Most of Cuba's economic problems are systemic and generally deteriorating. Popular expectations for economic improvement, heightened by dramatic comparisons offered by visiting U.S. relatives, have been and will continue to be frustrated. Although Cuba's economic problems are probably understood at the technocrat levels, the Castro leadership may not be fully aware of the potential implications for the long term survival of the revolution.

As in past periods of adversity, Cuba's response—as outlined in the 1981–85 plan—will be to rely even more on Soviet economic assistance to overcome chronic problems. But Moscow faces its own severe economic problems as well as heightened competing demands from its other allies for increased deliveries of key resources, especially oil and food. Thus, in the period to 1985, Castro for the first time most likely will confront a slow-down in the real volume of Soviet aid which may well peak and level off or perhaps even decline.

Oil is likely to be the key focus of concern for both Havana and Moscow. With production leveling off and deliveries to Eastern Europe fixed at 1980 levels, Moscow will be hard pressed to provide Havana the increased oil promised for 1985. Moreover, even with imports in promised volumes, Cuba will not be able to meet its minimal production goals for key sectors, including electrical power.

Further integration into CMEA will provide little relief for Cuba's other economic problems. Continued foreign trade dependence on sugar will insure that erratic swings in hard currency earnings will persist. As a result, investment for development of nonsugar industries and the availability of consumer goods will continue to stagnate. The added burden on limited hard currency resources for servicing Cuba's large debt ($2.6 billion) will also intensify as principal payments fall due in substantial volume.

Thus, assuming further integration into CMEA as planned, Cuba over the next five years faces more austerity—perhaps interrupted by small periodic advances as the sugar price swings upward. On the other hand, if shortfalls occur in Soviet energy supplies, an austerity scenario will prove the best outcome Havana can anticipate.

I. Revolutionary Balance Sheet

On his 54th birthday in 1980, Fidel Castro could reflect on twenty years of unique social experiment in the Western Hemisphere. At the outset, the Cuban revolution set lofty goals of socio-economic egalitarianism and gathered widespread support from most of the population with the promise of both an improved living standard and a new pride of nationalism.

After two decades, a comprehensive assessment of the Cuban economy is especially timely. First, Cuba's development model has attracted wide admiration in the Third World as having "solved" the multifaceted social, economic, and political problems of development. Second, Cuba has probably exhausted the gains as perceived by the population from installation of socialist egalitaranism and has become more and more deeply involved in and dependent on trade with and subsidies from far distant economies. Havana therefore faces crucial economic decisions in the next half decade which will set development prospects long into the future, including, probably the post-Castro generation.

SUCCESSES

The genuine socio-economic and political accomplishments of the Cuban revolution have attracted much international acclaim. These accomplishments include:

A highly egalitarian redistribution of income that has eliminated almost all malnutrition, particularly among children.

Establishment of a national health care program that is superior in the Third World and rivals that of numerous developed countries.

Near total elimination of illiteracy and a highly developed multilevel educational system.

Development of a relatively well-disciplined and motivated population with a strong sense of national identification.

FAILURES

While these achievements have been significant and are distinctive among LDCs, they have entailed substantial costs which have perhaps been less noted. Cuba's reliance on a centrally planned economy and a controlled society have resulted in systemic economic inefficiency and political conflicts abroad, that have necessitated continuous massive, economic and military aid from its principal patron, the U.S.S.R. Notwithstanding $13 billion of Soviet aid over the last decade, measured against conventional criteria, Cuba's economic performance has been poor as evidenced by:

Dependence on massive infusions of Soviet economic aid to meet minimal investment and consumption needs.

Real economic growth has barely exceeded population growth.

Continued extreme dependence on sugar for development of the domestic economy and foreign trade resulting in stop-and-go progress closely tied to volatile swings in world sugar prices.

Stagnant living standards, an oppressively inefficient bureaucracy, and poor labor productivity.

Heavy reliance on trade within CMEA, where supply constraints and delivery problems severely compound economic management difficulties.

Near total reliance on a single energy source—Soviet exports provide 99 percent of Cuba's oil and three-fourths of its total energy needs.

Moreover, some of the revolution's "accomplishments" have themselves generated adverse economic consequences which cause Havana increasing difficulties.

The institutionalization of a Soviet type centrally planned economy has burdened Cuba with a vast administrative bureaucracy that stifles innovation, productivity, and efficiency necessary for economic advance.

Cuba's economy, still dominated by agriculture, will be hard pressed to provide employment for a highly educated labor force that is growing 3 percent annually. Frustration of new workers could continue to retard productivity.

Centralized management of foreign trade has proved difficult to administer because of both the low priority afforded Cuba by its CMEA trade partners and their inflexibility in responding to any import requirements not anticipated in the annual trade plan, as will difficulties caused by the volatility in hard currency trade which remains dominated by sugar.

After twenty years of accepting austerity and sacrificing present consumption for investment in future development, the Cuban people have a growing awareness that only their minimal needs are satisfied and that they face continued frustration in their expectations for improvement.

The egalitarian distribution of income has also served to erode material incentives and dissipated labor motivation to the point where productivity is dismal.

Cuba's aggressive international profile, emphasizing identification with violent revolutionary struggle in the Third World and its close association with Soviet foreign policy objectives, have prejudiced relations with the United States and other Western countries. As a result, the U.S. trade embargo has continued to narrowly restrict Havana's economic development options. necessitating an ever growing dependence on CMEA, especially the U.S.S.R.

FOREIGN TRADE PERFORMANCE: CMEA TRADE

The role of foreign trade in Cuban economic development can hardly be overemphasized. The island based economy is highly open to trade, with global exports and imports accounting for 34 and 36 percent, respectively, of Cuban GDP.

The trade impact of Havana's heavy reorientation from the U.S. to CMEA has been dramatic. Prior to the revolution, 75 percent of exports and 65 percent of imports were in trade with the U.S. Twenty years later CMEA countries accounted for about 75 percent of Cuba's foreign trade, with Cuba's dominant trade partner, the Soviet Union, alone accounting for 65 percent of total trade turnover. (See Table 1.)

Cuban trade within CMEA essentially involves a barter exchange of sugar, nickel, and citrus for a variety of raw materials, industrial equipment, and some consumer products, including food. The specific quantities of products traded with each country are prearranged in annual trade plans. Cuba's status as a developing country affords it highly subsidized trade prices from its CMEA partners.

TABLE 1.—CUBA TRADE TURNOVER WITH CMEA COUNTRIES

[Dollar amounts in millions]

	1974	Percent	1978	Percent	1979	Percent
Bulgaria	$125.8	4.6	$288.8	4.0	$277.9	3.8
Czechoslovakia	113.7	4.1	138.9	1.9	171.9	2.3
German Democratic Republic	40.4	1.5	189.5	2.6	356.4	4.8
Hungary	32.4	1.2	30.6	.4	133.3	1.8
Poland	28.5	1.0	74.4	1.0	104.6	4.8
Romania	13.7	.5	4.0	.1	39.8	.5
East Europe total	354.5	12.9	726.2	10.0	1,083.9	14.7
U.S.S.R	2,166.3	78.6	6,121.9	84.0	6,221.5	85.3
Unallocated [1]	236.6	8.6	442.8	6.1		
Total, CMEA [2]	2,757.4	100.0	7,290.9	100.0	7,355.4	100.0
Cuba world turnover [3]	5,282.3		9,217.3		9,908.0	
Percent with CMEA		52.2		79.1		74.2
Percent with U.S.S.R		41.0		66.4		63.3

[1] Equals unexplained difference between sum of countries and official reported CMEA total.

[2] As reported in CMEA Statistical Yearbook except for 1979 which is sum of reported country turnovers.

[3] As reported in CMEA yearbook except for 1979 which was reported by Banco National de Cuba.

During the 1970s, Cuban economic relations with CMEA were developed according to the principle of "international specialization". Unfortunately, that principle perpetuated and deepened Cuba's historic dependency on sugar which now accounts for 83 percent of Havana's global exports by value compared to 80 percent in 1957.

HARD CURRENCY TRADE

Notwithstanding dominance by CMEA countries, especially the USSR, an essential portion of Cuba trade turnover in the last five years (averaging 25–30 percent) has been oriented to the West. Reflecting sharp swings in world sugar prices, Cuban hard currency earnings have fluctuated widely and made planning for imports from noncommunist countries difficult. After reaching $1.6 billion (70 percent from sugar) in 1975, hard currency exports declined to a low of $0.8 billion in 1977 before rising to a new high of $1.8 billion in 1980. (See Table 2.)

In the face of gyrating export earnings, Cuban efforts to maintain minimal imports from hard currency countries of crucial chemicals, industrial inputs, machinery and consumer goods have resulted in large trade deficits and forced Havana to bear an ever growing burden of hard currency debt. Since 1974 hard currency trade deficits totaling about one billion dollars have been financed by debt that reached to an estimated $2.6 billion by endyear 1980.

IMPORTANCE OF HARD CURRENCY EXPORTS TO CUBAN ECONOMY

In spite of Havana's reliance on intra-CMEA trade, hard currency export earnings will continue to be a key determinant of Cuba's economic future because:

> 30–35 percent Cuban foodstuffs must be imported and many products are either unavailable or in chronic short supply in CMEA.
>
> Most quality consumer goods, important to spur labor productivity, can be obtained only for hard currency.
>
> Many essential raw material inputs for nonagriculture industry must be imported from the West, e.g., synthetic textiles.
>
> High quality technology and machinery for agriculture and manufacturing sectors are generally not available in CMEA.
>
> Expanded hard currency earnings is desirable as a contingency to finance energy imports in the event of shortfalls in Soviet deliveries.

TABLE 2.—CUBAN HARD CURRENCY TRADE AND DEBT

[In millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	[2] 1980
Exports [1]	1,067	1,615	837	784	802	948	1,664
Imports [3]	939	1,572	1,272	1,334	948	1,006	1,409
Balance	128	43	−435	−550	−146	−58	155
Estimated net debt [4]	660	960	1,330	2,100	2,400	2,900	2,600

[1] U.N. data, adjusted to include sugar exports to U.S.S.R. paid in hard currency.

[2] Banco Nacional De Cuba, August 1981.

[3] U.N. data, adjusted to exclude imports of Canadian wheat and flour paid for by U.S.S.R.

[4] Commerce Department estimates.

Substantial hard currency is required to service Cuba's hard currency debt.

Improved hard currency export performance is important to Cuba's efforts to attract Western foreign direct investment to develop new manufacturing industries.

Generating more hard currency is clearly a key task for the Cuban economy, but in the existing environment Havana's options are very limited. Cuba's $2.6 billion external debt, $1.7 billion of which is owed Western commercial banks, has reached its upper limits. Both Western banks and Western governments are reluctant to increase their lending exposure, particularly while Cuban political adventurism continues. With access to new loans limited, Cuba's hard currency resources will, for the foreseeable future, be limited to earnings on exports to the West, limited income from tourism, and Soviet hard currency aid. A detailed outlook for Cuban hard currency exports and debt under increased integration with CMEA is presented in Part III.

IMPACT OF TRADE EMBARGO

Effective management Cuba's foreign trade is a formidable task complicated on the one hand by the rigidities of trading within CMEA and on the other by the volatility of hard currency exports tied to swings in world sugar prices. These inherent complexities have also been aggravated by the 20 years of a U.S. trade embargo.

The dislocations precipitated in the 1960s by the forced restructuring of trade away from the U.S. market are well documented. The impact of the embargo may seem to have lessened over time as Cuba's industrial base was retooled with equipment supplied by CMEA countries and, since the mid 1970's, as trade increased with Western countries such as Japan, Canada, and others.

However, the continued denial of Cuban access to U.S. trade and financial markets has effectively restricted the potential for trade and investment by other Western countries and narrowly circumscribed Havana's options for economic development, forcing increased dependence on CMEA. Thus, the U.S. embargo has been and continues to be not only a major, but a crucial impediment to Cuba's efforts at diversifying and expanding its hard currency trade, the key to improve economic growth and living standards. Indeed, it is fair to say that the U.S. embargo has condemned and will continue to condemn the Cuban economy to continued stagnation, with occasional temporary blips of modest improvement tied to upswings in the sugar price cycle.

DOMESTIC ECONOMY: PERFORMANCE VS. PLAN

Cuba's foreign trade deficiencies have both resulted from and contributed to its domestic economic difficulties. Since 1975, Havana's economic planners have, with few exceptions, failed to maintain increases in production of key export products. Outputs of sugar, tobacco, fish, and nickel have been erratic in recent years and fallen far short of production targets set in 1976. Among major five-year plan goals, Cuba was successful in meeting production goals only for eggs and electric power. (See Table 3.) Combined with volatile price fluctuations of key exports (especially sugar) the result has been wide

TABLE 3.—PRODUCTION AND GOALS OF MAJOR PRODUCTS

[In thousand tons unless stated]

	1975	1976	1977	1978	19779	1980	1980 goal	1985 goal
Agriculture:								
Export crops								
Sugar	6, 314	6, 155	6, 485	7, 350	7, 992	6, 800	9, 000–87, 000	10–10, 500
Tobacco	41	51	46	40	33	[1] 20	60	55
Citrus	182	199	178	198	186	NA	350–500	1, 300
Coffee	18	19	16	13	22	24	NA	16
Seafood	143	194	185	213	148	NA	350	165
Food crops:								
Rice	338	335	334	344	390	NA	600	640
Milk	591	682	722	783	791	NA	1, 000	1, 040
Pork	43	52	58	61	NA	NA	80	85
Eggs (million dozen)	146	142	154	160	168	175	167	190
Beans	5	3	2	2	2	NA	NA	35
Industry:								
Nickel	38	37	37	35	32	37	100	69
Electric Power (megawatts)	6, 583	7, 191	7, 707	8, 491	9, 391	NA	9, 000	1, 500
Steel	298	250	330	336	328	NA	440	1, 800
Cement	2, 083	2, 501	2, 656	2, 712	[1] 2, 650	NA	5, 000	4, 900
Textiles (million Mz)	144	139	151	156	151	NA	260	325
Tires (1,000 units)	368	266	172	294	NA	NA	NA	NA
Consumer items:								
Refrigerators (1,000 units)	50	44	46	45	55	NA	100	75
Shoes (million pairs)	23	21	15	18	[1] 18	NA	35	29
Radios (1,000 units)	113	92	120	121	143	NA	300	500

[1] Estimated.

fluctuations in and general shortage of hard currency available for investment to expand and diversify Cuba's export production base. The vicious circle therefore continues.

In his December 1980 report to the Second Party Congress, Castro described the Second Five-Year Plan 1981–85 as "realistic". The plan called for a five percent annual increase "general economic growth", with continued emphasis on export expansion and import substitution in order to reduce "foreign dependence". Overall investment was to increase 15–20 percent over the five year period, down somewhat from the 1976–80 plan, and was to be concentrated on completing projects already underway.

Castro also claimed that the plan is "more responsive to the needs of the people" since real per capital income is set to increase 15–20 percent by 1985. To achieve that goal vis-a-vis an overall population growth rate of 1.6 percent, nominal economic growth will have to reach 5.5–6.5 percent annually. Daily caloric intake per capita is scheduled to increase to 3,155 (a level approaching that of the Soviet Union) from the current level of 2,800. Cuba's housing crisis is to be alleviated by construction of 40,000 new housing units each year compared to current annual production of 15,000 units.

Key export industries were scheduled for substantial growth in the five year plan. Once again, the 10 million ton sugar target was set for 1985, a target requiring sharply increased output over the 1980 disease strickened crop of 6.8 million tons. Nickel and cement output were also scheduled to double.

After sugar, probably the key indicator of feasibility in the Second Plan is the goal for electrical power, the essential input for much of the nonsugar economy. Installed generating capacity is to increase from the current 2,000 to 3,000–3,200 megawatts. New power plants apparently are to be thermoelectric, oil burning units, since work on the 440 megawatt nuclear plant "will continue" rather than be completed, according to Castro. In spite of the hoped for 50 percent increase in electrical generating capacity, Castro cautioned that "difficulties during peak periods" will continue through 1985.

Meeting these higher (but apparently minimal) power needs will be exceedingly difficult since Soviet oil deliveries were set to rise only 26 percent according to Castro's 1979 economic address. One year later Castro noted without clarification, that only "a 10–15 percent growth in fuel is expected" over the five year period.

While the Second Five-Year Plan avoids the wildly optimistic targets set for the First Plan in 1976 and is, in this sense, "realistic", achieving the high output levels anticipated for 1985 in crucial sectors will require extraordinary increases in domestic productivity, unusual reliability in deliveries from the U.S.S.R. and plenty of old-fashioned good luck!

CUBAN LEADERSHIP'S DILEMMA

After 20 years of social and economic experimentation the Cuban revolution now appears to confront a most uncertain period for sustaining its achievements. Cuba is still burdened with many of the rigid controls of a command economy modeled on the Soviet system and tied to Moscow by massive subsidies. In addition, Havana faces unprecedented economic pressures in the areas of energy, productivity, and unemployment. Moreover, popular expectations for an improved living standard, while modest, have been stimulated by the relative prosperity of 1974–75, and increased awareness of the outside world capped by the arrival of obviously prosperous U.S. relatives during 1979–80.

In the past, consistent increases in economic aid from Moscow have allowed the Cuban leadership to postpone adjustment to the realities of economic development which Cuba, like all the non-oil developing countries, now confronts.

In theory, the Soviet economic model, adapted to Cuba, promised to eliminate the unemployment and inflation that plague market economies. But theory has not matched practice. Cuba faces substantial structural unemployment as its agricultural based economy is incapable of generating sufficient jobs to absorb a growing, relatively well educated, labor force. On the price side, suppressed inflation has long been evidenced by rationing, queueing for essential products and a widespread black market.

Having failed to deal with either unemployment or inflation, the Cuban leadership is experimenting once again. A new system of enterprise management is being implemented to reduce inefficiency and misallocation of resources by measuring economic performance by "realistic" standards of cost accounting and profitability. In another move toward decentralization, in April 1980 the state-run food distribution system was supplemented by free farmers' markets where prices 7–10 times higher than in state stores demonstrate the extent of shortage and suppressed inflation.

Economic reassessment and institutional revision have been attempted before as Havana searched for solutions in the mid-1960s and after the disastrous 1970 attempt to harvest 10 million tons of sugar. However, in past crises Soviet largesse has always been available to offset failures and defuse domestic pressures for any substantial change in the system. But Cuba is likely to be less fortunate in the 1980s, as its continuing economic difficulties may coincide with a leveling off of Soviet assistance forced by competing demands for economic aid from other allies in Eastern Europe.

The results of the Second Party Congress confirm that in recent months the Cuban leadership has devoted substantial attention to economic issues and is searching more intently than ever before for options and alternatives. The outlook for Soviet assistance will, as in the past, be crucial to Cuba's economic future. Fidel Castro in his report to the Congress provided an optimistic assessment for economic relations with Moscow through 1985. Our more pessimistic assessment follows.

II. SOVIET ECONOMIC ASSISTANCE: CURRENT STATUS

Cuba's economic ties to the USSR, the epitome of a client-patron relationship, have deepened significantly since the mid-1970's. Soviet economic assistance excluding military aid to Cuba has more than quadrupled since 1974, amounting to about $3 billion in 1979 (see Table 4). The sharp escalation in Soviet economic aid was necessitated on the one hand by continued (until early 1980) depressed sugar prices following the record high in 1974, and on the other, by sharp increases in oil prices.

Soviet aid has been dispensed to Cuba through a variety of means. However, since 1974, the key mechanism has been heavily subsidized prices favoring Cuba in trade between the countries. As a result of this subsidy system Moscow in 1979:

Paid the equivalent of about 44 cents a pound—five times the world price—for 3.8 million tons of Cuban sugar.

Paid the equivalent of $6,750 per ton—slightly above the current world price—for about 18,000 tons of Cuban nickel.

TABLE 4.—CUBA: SOVIET ECONOMIC ASSISTANCE

[In millions of U.S. dollars]

	Annual average 1961–70	1971	1972	1973	1974	1975	1976	1977	1978	1979
Balance of payments aid	255.0	509	632	437	289	150	150	210	330	440
Trade and development aid	216.0	427	535	404	255	115	115	175	295	405
Interest charges	16.6	57	69	0	0	0	0	0	0	0
Other invisibles	22.4	25	28	33	34	35	35	35	35	35
Total repayable aid (cumulative)	2,550.0	3,059	3,691	4,128	4,417	4,567	4,717	4,927	5,257	5,697
Subsidies	101.8	56	0	150	407	901	1,357	1,772	2,638	2,667
Sugar subsidy [1]	101.8	56	0	97	([3])	580	977	1,428	2,435	2,287
Petroleum subsidy [2]	0	0	0	0	369	290	362	328	165	365
Nickel subsidy [1]	0	0	0	53	38	31	18	16	38	15
Total grants (cumulative)	1,018.0	1,074	1,074	1,224	1,631	2,532	3,889	5,661	8,299	10,966
Total economic assistance (cumulative)	3,568.0	4,133	4,765	5,352	6,048	7,099	8,606	10,588	13,556	16,663

[1] The sugar and nickel subsides are estimated as the difference between the values of sugar and nickel exports to the U.S.S.R. and the value of these exports as sold on the world market. They are considered a grant and not subject to repayment.

[2] The petroluem subsidy reflects the difference between the value of petroluem purchased from the U.S.S.R. and the value of these imports at world prices. It is considered a grant and not subject to repayment.

[3] Negligible.

Supplied virtually all of Cuba's 200,000 barrels per day (b/d) petroleum needs either directly (or indirectly through Venezuela) at $12.80 a barrel, about one-third the OPEC price of $35 per barrel.

The impact of these trade price subsidies is dramatically demonstrated if Cuban trade accounts are adjusted to eliminate their effects (see table 5). Without subsidized prices from Moscow, Cuba's modest 1978 global trade deficit of $187 million would have been $2.8 billion.

In addition, Moscow has significantly augmented Cuban foreign exchange earnings in recent years with the reinstitution in 1975 of extra-protocol hard currency purchases of Cuban sugar. These purchases, which are made at world prices, have totalled about $970 million over the 1975–79 period.

CUBAN DEPENDENCE OVERWHELMING

The Cuban client role is reflected in its dependence on massive Soviet assistance to meet its basic consumption and investment needs. Cuba's general lack of exploitable natural resources, its semi-developed status. and its controversial foreign policies have combined to hamper Havana's ability to generate domestic investment capital or attract Western foreign investment. In recent years, Soviet support has been greater, and perhaps more crucial than ever, because of Cuba's deteriorating foreign payments situation and its ambitious foreign policy initiatives. For example, in 1979:

The $3 billion in Soviet economic assistance equaled about one-quarter of Cuban GNP.

The U.S.S.R. purchased 72 percent of Cuba's $4.5 billion of exports, including 55 percent of Cuba's sugar exports and 50 percent of Cuba's nickel exports.

The U.S.S.R. accounted for three-fifths of Cuba's $4.7 billion of imports, including all of Cuba's petroleum imports, the bulk of its imported foodstuffs, and a major portion of its capital goods.

TABLE 5.—FOREIGN TRADE ADJUSTED FOR PRICE SUBSIDIES[1]

[In millions of U.S. dollars]

	Annual average 1961–70	1971	1972	1973	1974	1975	1976	1977	1978
Total exports f.o.b.	677	861	840	1, 372	2, 707	3, 572	3, 284	3, 669	4, 545
Less Soviet sugar and nickel subsidies[2]	102	56	0	150	38	611	995	1, 444	2, 473
Adjusted total exports	575	805	840	1, 222	2, 669	2, 961	2, 289	2, 225	2, 072
Total imports, c.i.f.	971	1, 387	1, 297	1, 741	2, 693	3, 767	3, 879	4, 288	4, 732
Plus Soviet oil subsidy[2]	0	0	0	0	369	290	362	328	165
Adjusted imports	971	1, 387	1, 297	1, 741	3, 062	4, 057	4, 241	4, 616	4, 897
Trade balance	−294	−526	−457	−369	14	−195	−595	−619	−187
Adjusted trade balance	−396	−582	−457	−519	−393	−1, 096	−1, 952	−2, 391	−2, 825

[1] Estimates based on official Cuban and Soviet trade data.

[2] See table 35 for derivation of Soviet price subsidies.

Sources: Anuario Estadistico de Cuba (1972, 1976, 1978), Cuba: Economic Development and Prospects (Banco Nacional de Cuba, 1978), Vneshnyaya Torgovlya U.S.S.R. (1978).

The $125 million Soviet hard currency purchase of Cuban sugar accounted for about one-sixth of Cuba's hard currency export earnings.

On the Cuban domestic scene, over 160 industrial and other projects have been completed with Soviet aid. These projects account for 10 percent of total Cuban industrial production, including 30 percent of electric power output, 95 percent of steel production, 100 percent of sheet metal output, 12 percent of sugar milling capacity, and the bulk of Cuba's sugar harvest mechanization. Under the 1976–80 Five-Year Plan, the U.S.S.R. assisted development of projects in the electric power, nickel, sugar, petroleum, ferrous and nonferrous metallurgical, building materials, and transport sectors. These were carried out with some $1.7 billion in Soviet aid extended at the beginning of the Five-Year Plan and overseeen by an estimated 6.000 Soviet technicians in Cuba in compliance with an Intergovernmental Economic and Technical Cooperation Agreement.

COST TO THE U.S.S.R.

Viewed in macroeconomic terms, the burden to the Soviet economy of subsidizing its Cuban client appears to have been relatively insignificant. In 1979, Soviet economic support of $3 billion equaled only 0.4 percent of Soviet GNP. Even in the petroleum sector, Soviet deliveries to Cuba in 1979 accounted for only 2 percent of Soviet oil production, even though the total was equivalent to 13 percent of U.S.S.R. exports to CMEA.

However, it is in terms of hard currency that the burden of supporting Havana is most usefully viewed. The hard currency costs to the Soviets have been rising sharply since the mid-1970s, and will likely continue to increase rapidly for the foreseeable future. Over the 1960–73 period these costs amounted to a modest $1.5 billion, or only about $100 million annually, largely because of low world oil prices and Soviet reexport for hard currency of Cuban sugar after refinement in the U.S.S.R. (See table 6.)

Since 1974, however, soaring world oil and grain prices and the resumption of Soviet hard currency purchases of Cuban sugar (and simultaneous discontinuance of Soviet reexports) have driven hard currency costs steadily upward. Supporting Havana cost Moscow $1.5 billion in 1979 in direct hard currency outlays or lost export earnings—the equivalent of about 6 percent of Soviet hard currency ex-

TABLE 6.—SOVIET HARD CURRENCY COSTS[1]

[In millions of U.S. dollars]

	1960–73	1974	1975	1976	1977	1978	1979[2]
Total	1,455	660	1,253	1,107	1,240	1,157	1,489
Petroleum	1,009	548	635	745	838	887	1,149
Wheat/flour	575	98	155	150	179	118	155
Other grain	96	14	13	12	28	27	35
Sugar	−225	(3)	450	200	195	125	150

[1] Estimated direct cost of hard currency items purchased by the U.S.S.R. from Cuba or from the West for delivery to Cuba and the earnings foregone by deliveries to Cuba of goods which could have been sold elsewhere for hard currency.

[2] Provisional.

[3] Negligible.

ports. Moreover, the future hard currency cost of Soviet aid can only increase in step with the growing opportunity cost of supplying oil to Cuba, rather than selling it for hard currency.

According to Castro, Moscow has "guaranteed" delivery of 61 million metric tons of crude oil and refined products during 1981–85, a 26 percent increase over the 48.5 million tons supplied 1976–80. While specifics on pricing are not available, the hard currency export earnings forgone by Moscow will be massive. For example, valued at a world market price of $35 a barrel, 61 million tons of oil would generate $15.5 billion in Soviet hard currency earnings. Similarly, if oil exports of 14.4 million tons promised Cuba in 1985 are actually delivered, Moscow would forego $5.8 billion in hard currency earnings that year alone, assuming world oil prices rise to $55 a barrel.

Moscow's task in delivering the "guaranteed" 61 million tons of oil will be complicated by several factors:

Leveling off and possibly declining Soviet oil production.

Increased demand for oil by Soviet allies in CMEA, including Poland and Vietnam.

Continued Soviet reliance on exports of oil and refined products for more than one-half of hard currency earnings.

Soviet oil problems will clearly have an important impact on all the CMEA countries. In 1980, the 11 million tons supplied Cuba comprised 13.7 percent of estimated Soviet exports to CMEA. Moscow has cautioned Eastern Europe to expect a reduction in oil deliveries below the 1980 level (i.e., 81 million tons annually), for the 1981–85 period. If Soviet "guarantees" of 14.4 million tons in 1985 are actually delivered, exports to Cuba would rise to almost 18 percent of 1980 deliveries to Eastern Europe.

In view of these foreign and domestic constraints, Moscow clearly faces uncertainties in meeting its "guarantees" of oil to Havana through 1985. Accordingly, annual Cuban-Soviet bilateral trade negotiations can be expected to become increasingly complicated and acrimonious in dealing not only with oil, but with all commodities that necessitate hard currency expenditure by Moscow. An unusual four months delay in signing the 1980 trade protocol may indicate the start of problems that are sure to become more contentious.

SOVIET VIEW OF CUBA BURDEN

Faced with difficult choices, Moscow has been receptive to initiatives that could reduce the economic burden of Cuba. The Soviets worked for several years to arrange an oil swap whereby Venezuela supplied Cuba in 1979 with 10 000 bpd (about 5 percent of total imports). Moscow supplied equal amounts on behalf of Venezuela to European importers, particularly Spain. The swap saves the Soviets transport costs (split with Venezuela) but does not reduce the hard currency burden of foregone exports to the world market. Cuba pays the Soviets only the subsidized price (in sugar equivalent) for all oil imports, regardless of source. Both the Soviets and Cubans have reportedly discussed similar swaps with other Western hemisphere suppliers, but without conclusion thus far.

The Soviets have also urged both Washington and Havana to normalize trade relations in the expectation that restoration of a natural trade link would result in significant (albeit only vaguely perceived) economic gains for Cuba and thereby lessen the Soviet burden. Always hopeful to secure normalization on advantageous terms (i.e. Cuba's), the Soviets have thus far apparently not pressured Havana to restrain its aggressive international profile.

Since the early 1970s, Moscow has been increasingly insistent that Cuban economic managers adopt "principles of scientific socialism." In 1974, Soviet technicians virtually authored Havana's first five-year plan and recently repeated the exercise for the 1981–85 second plan period.

Between 1974 and 1979 Soviet trade turnover with Cuba rose from 28 percent to 43 percent of USSR trade with developing countries worldwide. Moscow may be increasingly concerned that Cuba is absorbing a disproportionate share and thereby retarding the development of Soviet trade relations and influence in other Third World countries.

CUBAN PERCEPTIONS OF SOVIET AID

While Fidel Castro and his colleagues are grateful for the Soviet assistance over the past two decades (without which the Cuban economy and, hence, the revolution could not have survived), they are also aware of the strings attached. Havana knows that its dependence on Moscow not only carries a degree of inherent control over its foreign policy, but also limits options for economic development. They also must be aware that Moscow's "strings" on Havana are likely to tighten as Soviet aid costs increase. Cuba is fundamentally an economically weak, dependent client of the USSR. That dependence has become increasingly difficult to manage as Havana has found the reliability of its patron sometimes wanting. Deliveries of import raw materials and products have been chronically late and completion of major joint industrial projects lags far beyond planned objectives. In a centralized economy like Cuba, enterprises are often dependent on a single supply source for inputs with the output of one unit preprogrammed as the input for another. Disruption in delivery of important supplies from the sole source, therefore, has a widespread impact on economic performance.

Castro's now famous December 1979 economic speech provided graphic evidence of the systemic problems in Cuba-USSR trade. As always, Fidel lavished bountiful praise on Moscow's brotherly solidarity in "guaranteeing" access to cheap oil and purchase of expensive sugar. However, he chided the Soviets, and other CMEA trade partners, for failure to meet delivery schedules (e.g. for poultry and timber) thereby forcing the premature slaughter of beef cattle and disrupting housing construction. Said Castro, "we are beginning to believe what happened this year with timber could happen again."

Indeed, given the increasingly poor performance of the Soviet economy in meeting its own objectives for domestic industries, Cuba with its inevitably lower priority, seems certain of facing recurring supply shortfalls.

Castro also criticized the variety and quality of products available from CMEA, which makes satisfying consumer needs and therefore boosting worker productivity difficult. He said, "Wouldn't it be better to get more towels and fewer TV sets? If only that could be!—but it is not a choice that can be made—the (CMEA) countries export to us products of which they have a surplus."

As the Cuban leadership reviews its development options over the longer term there is little evidence for optimism about the capacity and willingness of the USSR to supply economic aid at levels that do more to meet Cuba's most basic subsistence needs. But never hesitant, Havana will surely keep up the pressure on Moscow.

In summary, the Cuban revolution now faces an unprecedented array of economic and political uncertainties. In this atmosphere, the second Party Congress promulgated new initiatives designed to deal with Cuba's economic difficulties. However, effective solutions will require more radical departures from past practices than the Cuban leadership has been prepared to undertake thus far.

KEY ECONOMIC PROBLEMS RESTATED

Cuba's key economic dilemmas (all to a degree interrelated) included the need to:

Diversify access to energy resources.

Diversify the production base away from sugar and expand hard currency exports.

Reduce the debt burden.

Improve efficiency and productivity of the domestic economy.

Improve popular living standards.

The recent signing of an economic cooperation agreement with the U.S.S.R. for 1981–85, predicting a doubling of trade over that of the 1976–80 period, and the results of the Second Party Congress, apparently reconfirm Cuba's commitment to seek solutions through further integration in CMEA and dependence on the U.S.S.R. However, the key question remains: is Cuba likely to find solutions to its economic problems in the CMEA bloc? Havana's prospects through 1985 are assessed below.

III. CMEA INTEGRATION: CUBAN PROSPECTS THROUGH 1985

Throughout the 1970's Cuban "integration" into CMEA was essentially a euphemism for dependence on the Soviet Union. Eighty-four percent of Cuba's 1978 CMEA trade turnover was with the USSR. (See Table 1). In the past, Cuba's preplanned sugar exports to CMEA at highly subsidized prices have provided an essential cushion against sharp swings in world sugar prices. Indeed, sugar prices have been the determinant of the direction of Cuba trade. When world prices reached a historic high in 1974, trade with CMEA comprised only 52 percent of Cuba's worldwide trade turnover measured on dollar terms. However, during the 1975–79 period of lower sugar prices, Cuba relied on CMEA for up to 72 percent of its trade turnover.

Thus, CMEA trade has provided Havana with insurance against disaster. However, because of its fundamental structure, CMEA integration is unlikely to generate the economic growth necessary to provide the average Cuban a better life and thereby insure that the essential political base for the revolution can be maintained over the long term.

Energy supply: Oil

The key component of Cuba's economic relationship with the USSR is the oil/sugar exchange. In 1980, the USSR supplied Cuba 11.1 million tons of oil (225,000 bpd.), 6.1 in crude and 5 in refined products. Cuban imports accounted for about 14 percent of estimated 1980 Soviet oil exports to the European CMEA countries. Oil imports from the USSR supply 98 percent of Cuba's oil consumption. Small domestic wells supply the residual 2 percent—about 5,000 bpd. Moreover, Soviet oil accounts for three-fourths of Cuba's total energy needs. Oil is the sole power source for electricity, cement and nickel. Alternative energy sources exist only in the sugar industry where cane pulp, or bagasse, supplies much of the power for Cuba's 150 sugar mills and accounts for an estimated 20 percent of Cuba's total energy consumption. Small amounts of natural and manufactured gas as well as hydro resources complete the Cuban energy supply picture.

Cuban energy costs

The pricing of Soviet oil shipments to Cuba is an enigma. Cuba is supposedly included in the intra-CMEA pricing mechanism which bases oil export prices on a five year 1979 moving average of world market prices. Using this method, the price of Soviet oil deliveries to CMEA buyers should have been about $15 a barrel. However, as a result of its preferential developing country status in the CMEA group, according to Fidel Castro, in 1979 Cuba paid only $12.80 per barrel, a discount of 13%.

Because of these ambiguities, it is exceedingly difficult to determine Cuba's real cost of imported oil. Nevertheless, using the discounted CMEA price, imports of 11.1 million tons in 1980 cost Cuba the equivalent of $1.03 billion. What seems unambiguous, however, is that the sugar/oil swap represents a highly subsidized economic lifeline to Cuba compared to the alternative of filling its oil needs for hard currency, at OPEC prices. The Cuban leadership, at least in public statements, clearly expects that the Soviet lifeline will continue.

Regardless of the nominal price used, the real burden of oil payments on Cuba is lessened still further by a highly preferential trade pricing mechanism. Essentially, Cuba barters sugar for Soviet oil at prices set in annual bilateral trade negotiations. Since 1974, Moscow has relied on subsidized trade prices, rather than grants and loans, to channel massive economic aid to Havana. As oil prices climb so does the Soviet aid transfer which, calculated at the world price level, reached an estimated $3 billion in 1980. Even more important to Cuba is the fact that the Soviet offered price for preplanned sugar imports is directly linked to the cost of oil exports, thereby affording Havana constant oil/sugar terms of trade. With the rising cost of oil based on the intra CMEA price mechanism, this linkage of sugar and oil prices has been a tremendous economic benefit to Cuba.

Outlook for Soviet oil

According to Fidel Castro the U.S.S.R. has "guaranteed" oil shipments of 61 million tons to Cuba in the 1981–85 period. Oil exports to Havana are to rise slowly, reaching 14.4 million tons in 1985, including 400,000 tons for the new nickel production facility, which is scheduled then to be fully on line. Consequently, excepting new supplies for nickel production, Cuba's oil resources in 1985 will be 22 percent above 1980 levels, representing an annual increase of 4 percent over the five year plan period; that is, if "guarantees" are kept.

Moscow has already cautioned their East European oil clients to expect no increases and probably a decline in deliveries compared to the levels supplied in 1980. The U.S.S.R. also faces growing demands for its own industry, for exports to other LDC allies (Vietnam, Ethiopia, etc.) and most importantly, for exports to the West. Oil and refined product exports currently provide more than half of total Soviet hard currency export earnings. Facing these multiple constraints Moscow clearly will have to make difficult choices in meeting oil deliveries scheduled for Havana.

Cuban energy demand

Cuba publishes little data on the composition of its energy demand. Consequently, a comprehensive energy use profile for all sectors of the economy cannot be constructed. However, a partial breakdown can be estimated from available information.

Electric power

Approximately 25 percent of Cuban oil is used to power 2,000 megawatts of installed thermoelectric generating capacity. In 1979, Cuba generated 9,400 Gwh of electricity, equal to about one-third the output of New York City's Consolidated Edison Company. Some 70 percent of the electricity provided power to Cuban industry and government services, with only the remaining 30 percent going to household and small farm consumers.

Sugar milling

While sugar grinding is largely powered by burning sugar cane pulp or bagasse, fuel oil is a necessary catalyst in most sugar mills. In 1980, Cuba's 150 mills consumed 4,000 bpd of oil.

Autos

With an automobile population of 250,000 (1 for every 40 Cubans) gasoline consumption represents a relatively small part of Cuba's total oil needs. Taking into account only rationed gasoline consumption (20 gallons per vehicle per week), Cuban drivers use the oil equivalent of 12,000 bpd. However, the nonrationed sales on the parallel market probably boost consumption to 20,000 bpd.

Other industries

Other key industrial users include the nickel industry which consumes 12,000 bpd to process 37,000 tons of nickel and cement production, which uses 9,000 bpd for an output of 2.7 million tons of cement.

1979 partial breakdown of Cuban energy use (barrels per day crude equivalent)

	Amount
Electric power	56,000
Sugar milling	4,000
Autos	20,000
Nickel	12,000
Cement	9,000
Total for above	101,600
Unaccounted residual	104,400
Total oil available	206,000

These key sectors account for consumption of only half of the oil resources available to Cuba in 1979. The remainder of Cuba's demand for oil based energy includes a variety of uses: fuel for the military, and the large merchant and fishing fleets, for the bus and truck transport fleets, for the railroads, including the extensive rail system servicing the sugar harvest, for production of LPG and kerosene for household use. Available data does not permit detailed estimates for each of these categories.

Nevetheless, Cuba's energy consumption patterns are clearly dominated by important users. With household energy consumption already at low levels, the impact of any oil delivery shortfalls on economic activity would be immediate. Timely oil deliveries in scheduled volumes from the U.S.S.R. will therefore probably be essential to achieve the annual 5 percent economic growth rate called for in the 1981–85 economic plan. Indeed, that goal may be unattainable because it is based on a 50 percent expansion of electrical generating capacity, which is apparently not matched by an appropriate rise in oil supplied to power new plants.

CUBAN ENERGY ALTERNATIVES IN CMEA

Insuring that the Soviets meet delivery schedules for "guaranteed" oil exports is a highest priority for Havana and continued close political and economic alignment with Moscow is clearly a necessary condition (but maybe not a sufficient condition) to the Soviets maintaining the schedule. However, a deepening of Cuban integration into the CMEA bloc will also narrow Havana's already very limited options for dealing with any oil shortfalls that do occur over the next five years.

FREE MARKET IMPORTS

Because of the massive terms of trade subsidies that support Soviet oil deliveries, Cuba would face a heavy financial burden if forced to purchase oil on the world market for hard currency. To illustrate, replacing 1980 Soviet deliveries with free market oil at the current OPEC price of $35 a barrel would cost $2.84 billion, $1.8 billion more than the cost from the Soviets and $700 million more than Cuba's estimated record high 1980 hard currency export earnings. Thus, even in years of unusually high sugar prices, Cuba would face an impossible burden in financing oil imports, while maintaining other essential imports of food and industrial inputs as well.

OTHER SUBSIDIZED OIL SOURCES

While Cuba's vigorous pursuit of improved relations with Mexico, Iraq, and Libya has met some success, none of these countries seem likely to replace Moscow as a concessionary source for oil for Havana. Cuba receives about five percent (10,000 bpd) of its oil needs from Venezuela under a swap arrangement involving the U.S.S.R. and Spain. Oil is available to Cuba under this swap at the same subsidized price as direct imports from the U.S.S.R., with Moscow paying Venezuela the current world price. However, periodic discussions with Mexico on establishing a similar oil swap arrangement have not been conclusive and there is little or no prospect of subsidized oil from any source other than the U.S.S.R.

CONSERVATION

The outlook for conservation is little better. According to Fidel Castro, during 1976–80 Cuba made great progress in increasing energy efficiency. For example, the 1980 harvest consumed 1 gallon of oil per ton of cane ground compared to 2.1 gallons in 1976. Oil consumption for electric power generation improved to 296 grams of oil per Kwh. compared to 398 grams in 1958, and 314 grams in 1976. Since the bulk of Cuban oil consumption is in key economic sectors, e.g. industrial electric power generation, sugar harvest, transport, etc., further energy conservation measures probably would require substantial capital investments in technical modifications for industry and agriculture. Almost invariably, the know-how and equipment required would not be available in CMEA. Therefore, Cuba's limited hard currency resources, which are a constraint on all Havana's economic options, will likely impede Cuba's energy conservation efforts as well.

DOMESTIC OIL PRODUCTION

Cuba has long maintained (but never substantiated) the existence of significant oil resources offshore, but U.S. industry sources generally describe the prospects as marginal. The technology available in CMEA is incapable of exploring or exploiting oil at the offshore depths around Cuba.

Havana recently concluded a cooperation agreement with PEMEX, the Mexican oil enterprise, providing for joint exploration. The advanced technology needed for offshore exploration (and ultimately production) is generally in short supply from non-U.S. sources. PEMEX is unlikely to allocate scarce resources in search of unpromising prospects for oil near Cuba.

NUCLEAR POWER

In a December 1979 speech, Fidel Castro noted that "a substantial portion of Cuban electricity would be produced by nuclear plants in the future". However, that future seems distant. In 1972, the Soviets agreed to construct two 440 megawatt nuclear power stations in Cuba. When (if?) completed, these two units would provide the equivalent of 40 percent of Cuba's 1980 installed capacity.

However, work on the first plant has been plagued by numerous technical problems, probably compounded by the lower priority afforded the Cuban project than to the highly ambitious nuclear development program underway in the European CMEA countries. As a result the first 440 megawatt reactor (equal to 20 percent of Cuba's 1980 capacity) is not expected on line until the late 1980's. Installed nuclear power thus is unlikely to be available during the crucial mid-1980s when Soviet oil availability is likely to be most unreliable.

ETHANOL

Cuba would seem to be ideal for biomass energy development. Sugarcane is by far the most efficient raw material for producing ethyl alcohol which could supplement Cuban gasoline and diesel consumption. However, limited investment capital would be a key constraint on expanding Cuba's current alcohol output of 770,000 liters. Additional resources are not likely to be provided by Moscow and hard currency resources are already overcommitted to other investment needs.

The conclusion seems clear that, assuming no change in Cuba's pervasive economic orientation to CMEA, Havana has essentially no viable alternative to continued dependence on Soviet supplied oil. However, the outlook for CMEA energy is uncertain and any shortfalls in Soviet deliveries would have serious affects on Cuban economic activity and living standards.

ECONOMIC AND FOREIGN TRADE DIVERSIFICATION

The key principle of CMEA economic integration has been to promote "international specialization", accomplished through coordination of economic development plans and by targeting investment and economic aid to those sectors in which each economy has a comparative advantage. The end result for Cuba has been a heavy concentration of investment and aid in traditional industries, especially sugar, nickel and citrus. The only essentially new industry developed under CMEA auspices has been the fishing fleet.

EXPORT INDUSTRIES: SUGAR REMAINS THE KEY TO CMEA TRADE

Although production in each of these key sectors has expanded beyond prerevolution levels, Havana's historical dependence on sugar has in fact increased. Sugar and its derivatives now account for 83 percent of Cuba's exports worldwide compared to 80 percent before the revolution.

The European CMEA countries imported 63 percent of Cuba's sugar production since 1975 (see Table 8). The USSR itself is the world's largest sugar producer and all the East European countries produce at least some sugar. Consequently, CMEA demand for Cuban sugar varies with swings in domestic production. When not consumed, excess imports from Cuba have usually been resold on world markets. In 1980, poor crops in Cuba and the USSR have forced the Soviets to import more than 3 million tons from the world market in addition to about 3 million tons from Cuba.

Reflecting the then tight world sugar supply and a commitment to continue reliance on sugar in 1980, Havana announced plans to boost production in stages to 10 million tons by 1985. Accomplishing what would be a 50 percent increase over average output of 6.5 million achieved in 1974–79 will be very difficult, though not impossible.

However, finding export markets could be another story. World sugar production is now in surplus and the switch to alternative sweeteners (e.g. fructose) is continuing. The steady pressure toward lower prices will only be marginally offset by increased use of sugar cane for ethyl alcohol production.

Indeed, world consumption of sugar is expected to grow no more than 1.5–2 percent yearly to 1985. Cuban production of 10 million tons by 1985 would represent annual increases of 6.6 percent in Cuban output. To expand exports, Havana will have to find new markets as well as increase Cuba's share of existing markets, both difficult tasks made more so if the large U.S. market is still foreclosed to Cuban sugar.

TABLE 8.—KEY CUBAN EXPORTS

Product	1974		1975		1976		1977		1978		1979	
	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent	Quantity	Percent
Sugar (thousand metric tons)	5, 185	---------	5, 439	---------	5, 744	---------	6, 200	---------	7, 269	---------	7, 262	---------
Of which:												
To CMEA	2, 771	53	3, 708	68	3 711	65	4, 421	71	4, 610	63	4, 681	65
To non-CMEA	2, 414	47	1, 729	32	2, 033	35	1, 779	29	2, 659	37	2, 581	35
Nickel (thousand metric tons)	34	---------	31	---------	35	---------	34	---------	35	---------	33	---------
Of which:												
To CMEA	21	61	23	23	25	70	24	70	25	70	23	70
To non-CMEA	13	39	8	27	20	30	10	30	10	30	10	30
Tobacco (thousand metric tons)	16	---------	14	---------	15	---------	(1)	---------	(1)	---------	(1)	---------
Of which:												
To CMEA	2	13	2	13	2	13	---------	---------	---------	---------	---------	---------
To non-CMEA	14	87	12	87	13	87	---------	---------	---------	---------	---------	---------
Rum (thousand hectaliters)	56	---------	92	---------	90	---------	(1)	---------	(1)	---------	(1)	
Of which:												
To CMEA	48	88	79	86	80	89	---------	---------	---------	---------	---------	---------
To non-CMEA	8	24	13	24	10	11	---------	---------	---------	---------	---------	---------
Citrus (thousand metric tons)	56	---------	60	---------	61	---------	(1)	---------	(1)	---------	(1)	---------
Of which:												
To CMEA	55	99	57	95	58	95	---------	---------	---------	---------	---------	---------
To non-CMEA	1	2	3	5	3	5	---------	---------	---------	---------	---------	---------

[1] Not applicable.

Soviet requirements for Cuban sugar through 1985 are not likely to exceed the annual average 3.8 million tons imported in 1977–79. Indeed, the 1981–85 Cuban-Soviet agreement calls for yearly exports of 3.5 million tons. Moreover, as sugar prices decline, maintaining Cuba's terms-of-trade for Soviet oil stable will require Moscow to continue to increase sugar price subsidies. Otherwise, Cuba will face the prospect of reduced imports of Soviet nonoil products. Thus, Havana's interest in expanding sugar exports to the USSR could decline if other markets can be found.

Facing the higher cost of subsidizing food consumption of their own population, most East European countries are unlikely to willingly incur added burdens required to subsidize imports from Cuba. Annual sugar deliveries to Eastern Europe are thus likely to continue at the past level of 500,000 tons. Barring improved political relations with China, exports to this market are also likely to remain stable at about 500,000 tons yearly. Domestic consumption in Cuba (rationed) should also remain near the 500,000 ton level. Thus, Havana will have to find markets outside CMEA for up to 5.5 million tons of sugar—more than double current sales—if the 10 million ton production goal is attained. Cuba's key noncommunist hard currency sugar markets in 1979 included:

	Tons
Canada	316,000
Japan	300,000
Iraq	243,000
Algeria	203,000
Syria	141,000
All others	844,000
Total	2,049,000

In 1980 Mexico for the first time became a major importer as Cuban exports reached 500,000 tons.

Among Cuba's customers, only Japan and Mexico offer substantial potential for expanding imports of sugar. However, high sugar prices in 1980 again stimulated Japanese interest in boosting fructose production, while a recovery of Mexican sugar production must be anticipated.

Cuba also faces a key multilateral constraint on its hard currency sugar exports; the International Sugar Agreement (ISA), which Havana helped design to restrict free market price swings through use of buffer stocks and export quotas. Under the ISA, Cuba's exports to free world markets are usually limited to 2.8 million tons. When high prices have exceeded the ISA ceiling, allowing quotas to be suspended, open competition thus prevails in world sugar trade. However, market prices are likely to be within or below the ISA range during much of the 1981–85 period with quotas thus in force, Cuba would face a difficult task in finding new hard currency markets for an additional 2.5 million tons, if its production goals are met.

In sum, if Cuba's trade orientation to CMEA continues, the outlook for sugar holds:

Possible deterioration of terms of trade vis-a-vis CMEA, and especially for Soviet oil imports;

Extreme difficulty in expanding hard currency markets; and

A consequent need to either limit production increases, accumulate unexportable surpluses, or repudiate the ISA and opt for open free market competition thereby risking a return to the wide price swings of the past.

OTHER INDUSTRIES

Aside from sugar, CMEA development strategy as implemented in Cuba will continue to emphasize the nickel and citrus industries. Since Cuba has little to offer beside sugar, both products are welcomed by Cuba's CMEA trade partners in balancing, at least partly, their trade flows.

With Soviet and East European assistance, nickel production is being expanded from the current capacity of 38,000 tons to a goal of 70,000 tons by 1985. Approximately 75 percent of current production is exported to CMEA and half of the planned additional output is reportedly committed to repay investments. Thus, by 1985 Cuba could have a total of about 23 tons available for HC exports, about three times present capacity.

Cuba's nickel industry is based on two pre-revolution U.S.-built plants which, although substantially renovated by the Soviets, continue to be only marginally efficient by world industry standards. Both employ energy intensive processes for extracting nickel. The new Punta Gorda plant, under construction with Soviet assistance, will reportedly be more efficient than the existing plants but has been plagued by long delays and is unlikely to employ the most up-to-date technology and will likely be a heavy oil consumer.

Consequently, as in the past, the competitiveness of Cuban nickel in world markets will depend on the availability of subsidized Soviet oil, the key element in production costs. Finally, faced with the prospect of possible strong competition from seabed nickel, now in the development stage, the future economic viability of Cuba's nickel industry may well be in question.

Citrus production has remained stagnant at between 180–190,000 tons, and the production goal of 350,000 tons by 1980 clearly has not been met. Although substantial investments have been made in infrastructure for the industry, the quality of Cuban citrus has failed to meet world market standards. Consequently, virtually the entire export crop continues to be shipped to CMEA, especially the USSR, where chronic shortages always guarantee a market. Without further investment, technical assistance and specialized equipment, generally available only in the West, export markets will remain limited to CMEA.

TOURISM

CMEA countries have not helped develop Cuba's traditional advantage in tourism. The USSR and Eastern Europe have themselves relied heavily on Western companies for investment and know-how in building tourism industries that meet world class standards. Cuba must therefore turn elsewhere for aid in developing its potential comparative advantage in this key service sector. Havana's primary tourism market is the U.S., but U.S. tourism to Cuba will continue to be constrained by the absence of normal relations and continued bilateral hostility.

PROSPECTS FOR IMPORTS FROM CMEA

The outlook for Cuban imports is not much more promising than Cuban exports. Continuing past export patterns will insure chronic constraints on hard currency earnings and thus dependence on CMEA, particularly the USSR, for the bulk of essential imports. (See Table 9.) Prospects for expanding past import volumes are not good.

The Soviets supply the bulk of Cuban food imports, either directly (e.g. dry milk) or from third countries on Soviet account, (e.g. wheat and flour from Canada). Faced with increased need to import Western food supplies for its own population, Moscow is likely to strongly resist Cuban demands for more food aid.

The Soviets are able to supply only a portion of the raw material and intermediate products imported by Cuban industries. Some key new plants, such as textiles, which Cuba has counted on for both domestic supply and exports, require substantial imported inputs from the West, paid in hard currency.

Eastern Europe is also likely to resist expanding exports to Cuba of other key products. Popular discontent in Poland has sharply focused the attention of the CMEA leaders on the increasingly difficult task of improving (or at least maintaining) living standards of the population. Indeed, a key spark to Polish discontent was reported to be the discovery of canned meat products destined for Cuba, under fake labels as non-meat items. In this environment, Cuba's bargaining position for imports of consumer goods and food commodities faces continued erosion.

Havana will have to rely, more than ever, on Moscow's "encouragement" of Eastern Europe to supply needed products to Cuba. However, traditional arguments based on the Cuba's special needs as a less developed CMEA member are unlikely to be as persuasive as in the past.

CUBAN DEBT TO CMEA

Prior to 1974, the CMEA countries extended economic aid to Cuba mainly in the form of trade credits and development grants. While Cuba's resulting debt obligations to Eastern Europe are not known, in 1986 Havana is scheduled to start repaying some $5.3 billion in interest-free debts due Moscow. Since repayments will be made in kind, (i.e., sugar shipments probably at subsidized prices), the real burden on Cuba is likely to be relatively small, though it will, nonetheless constitute a drain on Havana's always limited resources.

CUBAN HARD CURRENCY DEBT AND TRADE PROSPECTS

Further political and economic integration into CMEA will also insure continuation of the heavy burden of Cuba's hard currency debt, estimated at $2.6 billion in 1980. Assuming Havana was successful in rolling over all principal payments falling due, more than $200 million in interest charges alone were probably paid in 1980. In order to pay interest and reduce outstanding debt principal, Cuba would have to maintain a substantial surplus in its overall hard currency balance of trade, an unlikely possibility over the next five years assuming no change in the current trade orientation to CMEA.

TABLE 9.—PERCENT OF TOTAL CUBAN IMPORTS OF SELECTED PRODUCTS SUPPLIED BY CMEA COUNTRIES

Product and source	Percent, 1974	Percent 1976
Canned meat:		
CMEA	60.0	77.0
U.S.S.R	42.0	64.0
Bulgaria	18.0	13.0
Condensed milk: U.S.S.R	100.0	100.0
Butter:		
CMEA	100.0	100.0
U.S.S.R	100.0	84.0
German Democratic Republic		16.0
Cheese:		
CMEA	100.0	100.0
U.S.S.R	49.0	58.0
Bulgaria	51.0	42.0
Fish:		
CMEA	89.0	84.0
U.S.S.R	87.0	84.0
Cereal and grain:		
CMEA	83.0	94.0
U.S.S.R	83.0	82.0
Bulgaria		12.0
Rice[1]: U.S.S.R	29.0	62.0
Corn:		
CMEA	30.0	27.0
U.S.S.R	27.0	21.0
Bulgaria	3.0	6.0
Wheat flour: U.S.S.R	100.0	100.0
Animal feeds: U.S.S.R	35.0	26.0
Lard:		
CMEA	91.0	91.0
U.S.S.R	59.0	43.0
Bulgaria	24.0	31.0
Poland	8.0	4.0
Hungary		8.0
Beams, wooden: U.S.S.R	99.0	94.0
Cotton fiber: U.S.S.R	100.0	100.0
Petroleum and petroleum products: U.S.S.R	99.9	99.9
Fertilizer:		
CMEA	74.0	95.0
U.S.S.R	67.0	79.0
Bulgaria	1.0	4.0
German Democratic Republic	6.0	12.0
Steel plate:		
CMEA	43.0	78.0
U.S.S.R	39.0	65.0
Bulgaria	4.0	12.0
Poland	1.0	1.0
Steel rods:		
CMEA	70.0	83.0
U.S.S.R	56.0	65.0
Bulgaria	14.0	18.0
Stationary diesel engines:		
CMEA	98.0	82.0
German Democratic Republic	40.0	46.0
U.S.S.R	28.0	35.0
Czech		1.0
Agricultural implements:		
CMEA	27.0	7.0
U.S.S.R	14.0	6.0
Hungary	13.0	1.0
Machine tools:		
CMEA	80.0	63.0
U.S.S.R	19.0	17.0
Bulgaria	61.0	46.0
Irrigation pumps: U.S.S.R	93.0	38.0
Autos: U.S.S.R	29.0	18.0
Busses: U.S.S.R	72.0	76.0
Trucks: U.S.S.R	30.0	47.0

[1] China supplied 35 percent of Cuban rice imports in 1976.

Source: Anuario Statistico de Cuba.

With an even closer Havana identification with Moscow, Western banks and governments are unlikely to significantly increase lending to Cuba. Indeed, there are current indications that many banks are reducing their exposure to Havana by refusing to rollover current debts. Thus, for the foreseeable future, Cuba's hard currency import potential will be determined almost solely by its export earnings plus any hard currency loans or grants Havana can squeeze from CMEA, less repayment of debts to the West. But, with the exception of a modest sugar windfall in 1980–81, Cuba's hard currency export prospects through 1985 are not very attractive under a close CMEA alignment.

Havana is unlikely to succeed in diversifying the product composition of its hard currency exports. Moreover, prospects for expanding Cuba's export market for its existing product mix will not be enhanced because economic dependence on Moscow is likely to necessitate close Cuban identification with Soviet foreign policy objectives that conflict with the interests of the Western industrialized countries. In this environment, Cuba's prospects for gaining access to the large U.S. export market are extremely dim. Moreover, continuation of the U.S. embargo will also significantly hamper Cuba's possibilities for expanding trade with other Western countries. Perhaps most important for the long term, Cuba's possibilities for direct investment to develop new industries will be extremely limited, since their viability would likely depend on direct export access to the massive U.S. market.

Further integration into CMEA is, therefore, unlikely to allow substantial change in either the composition or flow patterns of Cuban hard currency exports. Consequently, swings in the price of sugar will continue to be the key determinant of hard currency income and, as in the past, will constrain the pace and increase the uncertainty of overall economic development.

Although the resulting volatility makes projecting Cuban hard currency trade difficult, the following calculations illustrate the parameters Cuba faces barring a switch from its trade orientation to CMEA. Record high sugar prices in 1975 were primarily responsible for peak export earnings of $1.6 billion in 1975 (see table 10). But export and import growth rates over the 1975–79 period were actually negative (−2.3 and −2.2 percent respectively) as Cuba shifted its trade toward CMEA after 1975. Given Cuba's already large hard currency debt (2.6 billion, or 3 times its 1979 hard currency exports), future hard currency imports must closely parallel an export performance that is likely to be erratic, mirroring sugar price swings.

Table 10 provides illustrative import growth rates and matching export growth rates that would be required to stem growth in hard currency debt. For example, were hard currency imports to grow to 10 percent annually in nominal terms, exports would have to grow at 16.4 percent to stabilize debt at $3.0 billion by the end of 1983. The required 1983 export level of $1.6 billion, would necessitate exports of 2.5–3 million tons of sugar at 19 to 23 cents per pound. While exports and prices in or above this range were achieved or surpassed in 1980–81, such favorable market conditions are unlikely to persist over the multi-year period required for Cuba to stem growth of its debt while increasing imports 10 percent annually through 1983. In view of Cuba's negative 2.3 percent export performance over the 1975–79 period, optimism is not justified.

TABLE 10.—PROJECTED END 1983 AND END 1985 HARD CURRENCY TRADE AND DEBT LEVELS UNDER SELECTED TRADE GROWTH AND INTEREST RATE ASSUMPTIONS

Year	Assumptions			Balancing export growth rate	End year amounts in billions of dollars					Debt export ratio
	X growth rate	M growth rate	Interest rate		Export	Import	Trade balances	Interest	Debt	
1983		10	10	14.7	1,557	1,391	166	323	3,311	2.13
		15	10	19.3	1,821	1,662	159	326	3,353	1.84
1985		10	10	13.2	1,896	1,683	213	363	3,705	1.95
		15	10	17.8	2,404	2,197	207	371	3,797	1.58

But is even a 10 percent import growth adequate to meet the needs of Cuba's industry and consumer? Compared to the dismal −1.4 percent rate of 1975–79, it would appear to be. However, the adverse impact on living standards of that negative growth rate was probably offset by a 15 percent annual increase in the value of imports from CMEA. In particular, the steady rise in subsidized food imports from the USSR preserved popular consumption at minimal levels. Considering the economic difficulties confronting the East European countries, future similar volumes of food imports at these levels from CMEA would seem doubtful.

Also, the above projections implicitly assume that future inflation will affect imports and exports equally. But Cuba exports non-energy raw materials and agricultural commodities while importing manufactured goods. Havana, therefore, is likely to face a declining hard currency terms-of-trade. Consequently, achieving a 10 percent annual growth in imports could necessitate export growth rates in real terms substantially greater than the 16.4 percent projected above. Finally, a 10 percent annual growth in imports may prove less than adequate, since hard currency import products are in particular demand by Cuba's labor force which is growing rapidly at 3.5 percent annually. The outlook for Cuban hard currency trade is poor. The export growth rates required to finance adequate import levels and manage the external debt burden are unlikely to be consistently achieved.

IMPROVED ECONOMIC EFFICIENCY

Improved economic efficiency would probably include the following minimal objectives:

Greater efficiency in allocation of resources to fulfill socioeconomic goals and provide for an adequate living standard;

Fully develop comparative advantage in structuring foreign trade;

Maximize flexibility to insure effective response to external and economic change.

Can Soviet style central planning accomplish these objectives for the Cuban economy? After 10 years of application, is the Soviet model adaptable to a small developing economy, highly dependent on foreign trade?

Characterizing Cuba as a centrally planned economy prior to 1974 was largely a sham. Although multilayered bureaucratic organizations had been created, effective control of operating enterprises was only rarely achieved in a few key operating enterprises. Things began to change in 1974–76 as Havana planners drew up the first comprehensive five-year plan, under the close tutoring of Soviet technocrats.

As an adjunct to the plan, beginning in 1977, a new system of economic management (calculo economio) was imposed to enforce cost accounting and meaningful economic profitability standards on enterprise managers. Subsequent changes included funding enterprise operations with interest-bearing central bank loans, rather than nonrepayable national budget grants; salary reforms that tied pay directly to productivity and, most recently, granting substantial hire and fire autonomy to many enterprise managers. Similar trends in decentralizing economic administration were reflected in the opening of free farmers markets in April 1980 to overcome chronic inefficiencies in the state run food distribution system.

Most of the reforms Cuba is now implementing have been tried in the Soviet economy, generally with unsatisfactory results. In contrast, some of the smaller East European economies, especially those most heavily dependent on foreign trade with the West, have been far more successful in promoting economic efficiency through decentralized management.

In most cases, the key mechanism for economic administration is the price system. Enterprise managers must be guided by realistic, flexible prices that both reflect the cost of resources and respond to changes in market supply and demand.

In the Soviet Union, the failure to modify the system of centralized price administration has limited the impact of economic reforms. Managers continue to respond only to administrative directives which cannot mandate the most efficient allocation of resources. For the open Cuban economy (trade is 70 percent of GDP) effective internal prices must directly reflect world market prices. As long as more than three-fourth or more of its trade is conducted within CMEA, on the basis of preplanned delivery of physical quantities at fixed and subsidized prices, Cuba seems destined to repeat Soviet failures in attempts at economic reform. Even the best technocrats in Havana's State Committee on Prices are unlikely to succeed in providing enterprise managers with the price signals they need to make efficient decisions in allocating resources.

FOREIGN TRADE MANAGEMENT

Cuba's foreign trade planners face mounting difficulties that go beyond the inadequacy in quantity and quality of products available from its CMEA trade partners. In addition to pricing problems, intra-CMEA trade is plagued by inefficiencies which have cost the Cubans heavy, though unquantifiable losses.

As in the most CPEs, Cuban foreign trade is controlled by a central ministry, with 40 importing and exporting enterprises operating on the basis of pre-set targets in the annual trade plan. Management of intra-CMEA trade involves little flexibility once delivery volumes and terms are set in annual agreements with each trade partner country. There is little a trading enterprise can do to overcome the substantial delivery delays that are endemic in intra-CMEA trade.

In contrast, managing Cuban hard currency trade, where key export and import products are dependent on volatile commodities markets, often requires a rapid response to world market developments to make the most efficient use of scarce hard currency resources. Dealing with both markets simultaneously has caused expensive foul-ups for Cuban trading enterprises. For example, anticipating continued high sugar earnings in 1975–76, Havana's traders seriously overextended commitments for hard currency imports, necessitating contract cancellations and disruption of trade flows.

Cuba's trade structure also complicates inventory management, a chronic source of waste in the economy. Because of long lead times in negotiating imports from CMEA, inventories tend to be either excessive or nonexistent, while the need to husband limited hard currency resources forces enterprises to hold minimal supplies of goods imported from the West. Enterprise operations are frequently interrupted due to recurring shortages of import items and, as a result, the availability of consumer products—even rationed necessities—has been haphazard.

These systemic problems have also been greatly exacerbated by Cuba's inability to trade with its closest natural trading partner, the U.S., which could be an efficient supplier of virtually everything Cuba imports and a ready market for its exports.

UNEMPLOYMENT

A key factor in improving efficiency in the Cuban economy is more productive use of a relatively well-educated labor force that is growing rapidly. Prior to the 1980 Mariel exodus, overt unemployment reached an estimated 6 percent. But Cuba's employment dilemma is even more serious given pervasive underemployment of labor in marginally productive jobs and the counterproductive, pervasive administrative bureaucracy.

Over the next few years, Cuba will confront serious structural unemployment because the predominantly agriculture based economy is increasingly unable to generate the white collar, technical jobs expected by the growing army of graduates from an impressive education system. Technical and professional student enrollment reached 290,000 in 1980 and youths now view a higher education as virtually an entitlement to, as well as a prerequisite for, attractive employment.

In addition, the economy must absorb large numbers of youths who expect favored placement on completing their required military or "internationalist" service.

Cuba's labor problems may also be aggravated by recent economic reforms. To promote efficiency, enterprise managers are being allowed new autonomy in deployment of labor resources, including hire/fire authority and salaries linked to productivity. As a result, managers will have direct incentives to economize on labor and eliminate marginal jobs precisely when structural unemployment and underemployment are growing problems.

The kind of employment required by Cuba's growing labor force seems most unlikely to be generated by further integration in the CMEA system. The concentration of CMEA supplied investments in sectors where Cuba has a comparative advantage vis-a-vis the other CMEA countries will perpetuate the reliance on traditional industries, e.g. sugar, nickel, and citrus, where technical and skilled jobs comprise only a small portion of total employment.

In 1978, Cuban planners hit on what some view as an optimal solution to their labor surplus—export it. Currently 15–20,000 Cuban technicians and skilled workers are employed in construction projects in two dozen third world countries, especially in economies short of skilled workers, like Libya and Iraq. While many of these are part of Cuban foreign assistance programs, some are Cuban "gastarbeiters" who generate up to $100 million in hard currency income annually. However, future employment opportunities abroad for Cubans are likely to be limited by:

Increasing importance throughout the Third World of providing training and employment for the domestic labor force whose members often resent losing jobs to foreign workers;

Political impediments to accepting Cuban personnel in view of Havana's close identification with the Soviet Union:

Competition from other labor exporting countries, (especially South Korea, Turkey, and possibly China), with technical skills and equipment support superior to Cuba; and

Problems in reassimilating returnees into the domestic Cuban labor force.

Fidel Castro has suggested another possibility—exporting labor to the chronically labor-short CMEA countries, especially the U.S.S.R. Plans are reportedly underway to send 10,000 Cubans to Siberia to cut timber for export to Cuba. They would join the estimated 7–10,000 Cubans already working in European CMEA countries. If Cuba actually becomes a source of "gastarbeiters" for CMEA, the economic gains to Cuba are likely to prove marginal. CMEA countries will pay for Cuban labor "in kind" through bilateral trade flows, and as always, they will be reluctant to export high quality products that are already short at home. In particular, the food and consumer goods Cuba needs are the most unlikely forms of payment for labor supplied to CMEA.

In the case of Soviet timber, sending Cubans to Siberia is unlikely to provide any added assurance of delivery on future export contracts because the bottleneck is the inadequate Soviet transport system, rather than a shortage of able-body laborers or axes!

The establishment of new labor-intensive manufacturing industries would appear to be the only effective long-term solution to Cuba's unemployment problems. If production were high quality, such industries could also lead diversification and growth in exports to both hard currency and CMEA markets. However, the CMEA development program offers little prospect for investment in the kinds of industries capable of utilizing Cuba's labor resources. All CMEA members are striving to develop their own high quality export industries, but with few exceptions, they lack the technology, the organization and the incentive systems required for success.

IMPROVED LIVING STANDARDS

The average Cuban's material well-being improved during the 1960s as income was redistributed by the new revolution. However, GNP growth in real terms during the 1970s averaged only 2.5–3 percent, or about 1 percent per capita. Moreover, this slow growth has been uneven with the result that current availability of consumer staples, e.g. sugar, rice, beef, and coffee, clothing, is less than in 1970. (Table 11). Havana also has not been able to maintain existing housing, much less accomplish ambitious goals for new construction.

The social impact of slow economic growth in the 1970s was partly mitigated by an implicit "social compact", between the Cuban leadership and population based on a highly egalitarian income distribution and (more or less) guaranteed availability of necessities at highly subsidized prices. Over the last decade salaries have been tied to skill levels and currently range from 200 pesos monthly for common labor to 450 for top professionals. Food and basic consumer items have been rationed at low prices, and utilities, rent, transport, medical care, and education have been highly subsidized or provided free.

However, over time Cuba's "social compact" based on austerity shared equally, has had a perverse effect on economic performance. Labor motivation has been retarded and hobbled the economy with low productivity and chronic absenteeism. These problems worsened in the 1970s, prompting direct attention of the leadership. In 1979, both Fidel and Raul Castro publically blasted inefficiency, mismanagement, and cronyism. In November, a reshuffle of key economic ministries was carried out, followed by salary reforms to increase differentials and link pay more closely with productivity.

More importantly, however, the "social contract" has been eroded as consumer goods have been moved from rationed to "parallel" markets where larger quantities can be bought, albeit at very high prices. The change has been substantial. (See Table 12). In 1970, 94 percent of the 274 types of consumer goods available were rationed, but by 1980, only 21 percent of 874 products were controlled. The new free farmers markets, set up in April 1980, have accelerated the trend away from rationing.

While these economic reforms indicate pragmatism and a lack of rigid commitment to Soviet style management on the part of the Cuban leadership, chances for success remain uncertain. The outlook for Cuban consumers, assuming further integration into CMEA, is equally unclear.

TABLE 11.—PER CAPITA MONTHLY CONSUMPTION OF KEY FOOD AND CONSUMER PRODUCTS

[Pounds per capita]

	1971	1975	1976	1977	1978
Food products:					
Beans	1.9	1.8	2.0	1.8	1.9
Rice	8.3	8.2	7.5	6.9	7.3
Beef	2.0	1.2	1.4	1.5	1.6
Other meat	1.8	3.0	2.9	2.9	3.1
Sugar	8.6	5.7	6.6	6.8	6.8
Cooking oil or lard	2.3	2.4	2.4	2.3	2.4
Coffee	.6	.5	.5	[illegible]	.3
Fruits	6.1	9.2	10.2	9.2	9.1
Vegetables	4.6	7.3	7.3	5.7	5.6
Root crops	3.7	6.7	6.7	6.1	8.2
Fish	1.8	2.0	2.0	1.7	1.9
Eggs (units)	13.7	14.6	14.6	14.3	14.8
Bread	8.2	8.1	8.0	5.7	7.3
Tobacco (units)	2.2	2.3	2.2	2.1	2.2
Consumer goods (1965 index=100):					
Clothing	67.7	97.9	82.9	78.3	78.2
Leather shoes	120.5	129.4	120.7	112.4	123.1

Source: Official Cuban data.

TABLE 12.—PRODUCT DISTRIBUTION THROUGH THE RATIONING SYSTEM COMPARED TO OTHER OFFICIAL CHANNELS

[In percent]

	1971	1977	1978
Beans:			
Rationed	71.1	65.5	65.5
Other channels	28.9	34.5	34.5
Rice:			
Rationed	76.9	70.9	70.9
Other channels	23.1	29.1	29.1
Sugar:			
Rationed	79.0	73.1	71.4
Other channels	21.0	26.9	28.6
Cooking oil and lard:			
Rationed	69.1	66.8	64.8
Other channels	30.9	33.2	35.2
Red meat:			
Rationed	92.3	85.4	86.2
Other channels	7.7	14.6	13.8
Eggs:			
Rationed	70.5	68.0	64.2
Other channels	29.5	32.0	35.8
Fruits:			
Rationed	46.4	54.6	53.4
Other channels	53.6	45.4	46.6
Vegetables:			
Rationed	56.6	46.5	43.1
Other channels	43.4	53.5	56.9
Root crops:			
Rationed	72.6	72.0	70.3
Other channels	27.4	28.0	29.7
Dairy products:			
Rationed	87.6	76.8	75.5
Other channels	12.4	23.2	24.5
Seafood:			
Rationed	55.3	50.3	46.9
Other channels	44.7	49.7	53.1
Bread:			
Rationed	100.0	75.9	69.9
Other channels	0	24.1	30.1

Source: Official Cuban data.

The free farmer's markets may provide incentives and increase production of food. However, it is unclear whether the real income of private farmers will be offset by sharply higher prices charged them for non-food items, farm equipment, fertilizers, etc. Because Cuba's revolutionary society is based on equalized austerity, the rise of a new class of wealthy "laftifundistas" probably cannot be tolerated. Consequently, the new real income incentives and higher food production are not likely to be sustained.[1] Cuba is, therefore, unlikely to achieve self-sufficiency in food production and will remain dependent on CMEA (and hard currency) imports for at least one-third of essential foodstuffs.

The USSR supplies virtually all Cuban needs for wheat, flour, corn, rice, and lard. (See Table 9.) However, since all these products are either in short supply or not grown in the USSR, Moscow has had to procure supplies for Cuba from world markets. Feeding Cubans cost Moscow an estimated $200 million in hard currency in 1979.

Confronting food shortages of its own in 1980 and possibly beyond, Soviet willingness to continue subsidizing Cuban consumption at levels already approaching that of the average Russian (2800 v. 3300 calories) could diminish. Moreover, in the wake of recent events in Poland, East European countries will probably be even more reluctant than usual to continue subsidizing Cuban consumption.

---

[1] In his speech to the Party Congress, Castro noted a new tax system for peasants is "under consideration."

Although the diet of the average Cuban improved in 1980–81 as the leadership used part of the hard currency windfall from high sugar prices to finance food imports, such improvement could heighten popular expectations that are now being frustrated by the sugar cycle downturn. That scenario occurred in 1974–79. With a continued reliance on CMEA and sugar hard currency earnings to finance imports of food and consumer goods, replays seem inevitable.

CONCLUSION: PROSPECTS FOR CUBA IN CMEA

Cuba's economic integration into CMEA, begun in earnest in 1972, provided an essential underpinning that made possible some significant social advances. However, the availability from CMEA of raw materials and other imports—especially energy—at heavily subsidized prices has allowed Cuba to pursue economic development with little concern for the efficient use of resources.

In the 1980s the era of extensive growth based on ever expanding resource transfers from CMEA—and especially the USSR—is likely drawing to a close. In this environment, Havana's avowed pursuit of closer integration with CMEA, so strongly reaffirmed at the Second Party Congress, is unlikely to achieve a level of economic advance necessary to maintain (much less improve) the living standards of the Cuban population. Energy constraints and dependence on traditional sectors, especially an overwhelming reliance on sugar, will continue to condemn Cuba to a stop-go cycle of economic development, inevitably linked to volatile swings in world sugar markets. Consequently, CMEA aid may continue to protect the Cuban revolution from economic disaster, but only just. For the average Cuban, the outlook is for more austerity—perhaps interrupted by small periodic advances when the sugar price swings upward. On the other hand, if shortfalls occur in Soviet energy supplies, an austerity scenario will prove to be the best outcome Havana can anticipate.

GDR: PERFORMANCE AND PROSPECTS IN TRADE WITH THE WEST

By Ronald G. Oechsler

CONTENTS

Page
Summary 136
I. GDR Foreign Trade Objectives and Performance During the 1970s 137
  A. Trade with the West 137
  B. Trade with the United States 138
II. GDR Hard Currency Debt 139
III. GDR Hard Currency Trade Objectives and Strategy: 1981–85 140
  A. Objectives 141
  B. Constraints 142
IV. GDR Import Needs from the Industrialized West: 1981–85 143
V. GDR Export Capabilities to the Industrialized West: 1981–85 146
VI. Projected 1985 Trade with the Industrialized West 150
VII. U.S.–GDR Trade Potential Through 1985 150
  A. Constraints on U.S.–GDR Trade 150
  B. Potential Volume and Composition of U.S. Exports to the GDR 151
  C. Potential Volume and Composition of GDR Exports to the United States 151
VIII. Projected U.S.–GDR Trade Under Alternative Scenarios 152
  A. Low-range Estimate 152
  B. High-range Estimate 152
IX. Appendix. Tables A–1 through A–14 153

SUMMARY

Like other East European countries, the GDR faces growing economic pressures in the 1980's due to fuel and raw material price increases, a mounting labor shortage, rising consumer demands, and sizable debt repayment obligations. Resolution of GDR economic problems, moreover, is complicated by the present unfavorable international situation, marked by uncertainty over the future course of East-West relations.

Alone in Eastern Europe the GDR has charted a policy of accelerated economic growth during the 1981–85 Plan. Most of the targeted output growth is to be achieved through "intensification"—i.e. improvements in efficiency and productivity leading to increased production from the same or reduced quantity of fuels and raw materials. Having ruled out decentralizing reforms on the Hungarian model, the GDR will rely primarily upon administrative measures—chiefly further refinements in the newly created industrial combines—to boost economic performance. Also crucial to plan fulfillment is success in accelerating scientific and technological development, including the introduction of microprocessors, industrial robots, and other labor and raw material-saving equipment.

The top priority hard currency trade objective implicit in the 1981–85 Five-Year Plan is the elimination of the present GDR trade deficit with the West, averaging $1.5 billion per year since the mid-1970's. Alongside intensified export efforts, tighter limitations will likely be placed on imports for hard currency. Imports of complete industrial plants from the West are likely to be cut back significantly in favor of individual equipment items and assembly lines for modernization of existing production facilities.

The GDR's ability to achieve its ambitious production and export targets is constrained by a series of factors, particularly the extremely slow investment growth rate set by the Plan. (Investment is to increase less than half as rapidly as in 1976–80). The need to satisfy domestic consumers is also likely to limit the planners' ability to allocate an increasing share of production for exports, as has been done in the past several years. Unless these and other constraints are alleviated through further vigorous strides in productivity and efficiency, serious disproportions could develop by the mid-1980s. In this event the GDR could be forced to join its East European neighbors in accepting slower economic growth rates, a course which it has thus far resisted.

According to our estimates, GDR trade with the 17 Industrialized Western (I.W.) nations may reach $17.2 billion annually by 1985, 65 percent higher than 1980. Assuming adequate financing is available, GDR imports from the I.W. are projected to grow 10.0 percent per year to $8.6 billion by 1985. Exports are projected to reach the same amount based on 11.5 percent annual growth. The GDR would thus achieve balanced trade with the I.W. in 1985. Given the constraints on GDR delivery capabilities and Western import demand, efforts to balance GDR–I.W. trade prior to 1985 would probably require further sharp curbs on imports from the I.W., accompanied by a shift toward slower aggregate economic growth rates.

I. GDR Foreign Trade Objectives and Performance During the 1970s

A. TRADE WITH THE WEST

GDR trade with the West expanded rapidly in the 1970s, aided by improvements in East-West relations and the GDR's adoption of ambitious modernization and pro-consumer policies. The GDR's principal trade objectives during the early- and mid-1970s were: (1) modernization of lagging industries through imports of capital equipment and complete industrial plants; (2) expansion of meat and dairy supplies through large-scale imports of grain and livestock feed; and (3) acquisition of key raw materials and industrial commodities to compensate for stagnating deliveries from the U.S.S.R. and other CMEA suppliers.

The takeoff period in GDR-Western trade came in 1971–74, when imports expanded an average of 27 percent per year and exports grew 25 percent per year (Table A–1). The GDR ran a trade deficit with the West during this period, but buoyant export growth held the deficit to within relatively moderate proportions. The West's share of GDR foreign trade reached 33 percent in 1974, versus 26 percent in 1970 and 20 percent in 1960.

Subsequent international economic disturbances—e.g. oil and raw material price hikes, Western recession, etc.—caused a deterioration in the GDR trade balance. Since 1976, GDR hard currency trade (including trade with the LDCs) has been in deficit by $1.5 billion or more per year. As of end-1980, net hard currency indebtedness was an estimated $10.4 billion (Table A–4), much of it for updated industrial equipment and export development projects. During the same period, GDR-Soviet trade also swung deeply into deficit, due to rising prices for oil and raw materials. To offset terms of trade deterioration on Eastern and Western markets the GDR has had to export much larger volumes of manufactured goods, whose prices have risen much more slowly than those for imported commodities. It has been estimated that escalating foreign trade prices have imposed on the GDR economy an annual burden of between one and two percent of national income growth since the mid-1970s.[1]

Having ruled out decentralizing reforms on the Hungarian model, the GDR has responded to the deteriorating trade environment mainly by adopting administrative measures to enhance efficiency and boost export performance. The major effort to date has been the reorganization of industry into 157 or so *kombinate* or combines, each having jurisdiction over supply, R&D, manufacturing, and other operations involved in producing a given end product or group of similar products. The combine reform is aimed at easing supply problems, accelerating development and assimilation of new technology, and improving product quality, labor productivity, and raw material and energy conservation. Effective January 1, 1981, GDR foreign trade enterprises (FTEs) were brought into closer coordination with industrial producers, in some cases becoming divisions of the combines they serve. The objective is to improve GDR export performance by making industry more flexible and more responsive to changing world market conditions.

Partly as a result of export promotion and import reduction measures, the GDR hard currency trade position has recently improved. Exports for hard currency expanded 32 percent in 1980 versus 23 percent in 1979, while import growth was cut 9 percentage points to 21 percent, shaving $200 million off the 1980 GDR hard currency deficit. A large part of recent GDR export growth to the West, however, has been due to higher prices for refined oil products, which the GDR exports to West Berlin and other West European destinations in exchange for crude oil imports from the Federal Republic of Germany (FRG). The recent softening of world oil prices has significantly reduced this sources of future export earnings, placing much greater pressure on manufactured goods.

B. TRADE WITH THE UNITED STATES

Negligible prior to 1973, U.S.–GDR trade reached $600 million in 1980 (Table A–3), making the GDR the third largest U.S. trading partner in Eastern Europe. Agricultural exports—corn, wheat, and soybean oil-cake and meal—have comprised 90–95 percent of U.S. exports to the GDR. U.S. manufactured exports, on the other hand, have remained under $25 million, consistently below U.S. manufactured imports from the GDR ($39 million in 1980). Overall, the U.S. has enjoyed a $200–500 million annual trade surplus with the GDR since the mid-1970s.

---

[1] Michael Keren, "The Return of the Ancien Regime: The GDR in the 1970's." *East European Economies Post-Helsinki*, Joint Economic Committee of the U.S. Congress, 1977, pp. 743–46.

U.S.–GDR trade totalled $392 million in 1981, 35 percent below the record 1980 level. The decrease was largely due to $200 million drop in U.S. agricultural exports as grain shipments to the GDR by traditional non-U.S. suppliers returned to levels more nearly in line with previous years. In 1980, grain exports by non-U.S. suppliers were exceptionally low, enabling the United States to supply a record 3.1 million metric tons (MT) of grain.

During the 1970s, the GDR's drive to increase meat and dairy production based on imported grain was a primary impetus for expanding U.S.–GDR trade. The United States was by far the largest overseas grain supplier to the GDR, providing over one-half of GDR imports worldwide. Trade in manufactured goods, however, has remained modest in the absence of normalized trade relations.[2]

In the last several years progress has been made in bilateral relations which has contributed to an improved trade environment. Consular and Parcel Post Agreements have gone into force and there has been a continuing exchange of information on patents. Three GDR foreign trade organizations have opened representative offices in New York City, and six U.S. firms have opened offices in East Berlin. A branch office of the GDR Embassy's Commercial Section is also located in New York.

On the strength of its large agricultural shipments the United States has held second place among the 17 Industrialized Western (I.W.) exporters to the GDR. In 1980 the United States provided 10.0 percent of total Industrialized Western exports to the GDR, while taking only 0.9 percent of Industrialized Western imports of GDR products.

II. GDR HARD CURRENCY DEBT

During the 1970s the GDR drew extensively on Western credits to finance imports of machinery, raw materials, and agricultural products. From $1.2 billion in 1971, net hard currency debt rose nearly nine-fold to an estimated $10.4 billion as of end-year 1980 (Table A–4).

Commercial debt—mainly medium-term bank loans—comprised over 85 percent of GDR gross debt in the seventies. The remainder was made up of official export credits and credit guarantees, including an interest-free overdraft facility or "swing credit" extended by the FRG. Since 1975 the swing credit has been set at DM 850 million ($470 million at the 1980 exchange rate).

---

[2] The Trade Act of 1974 established certain restrictions on U.S. trade with non-market economy countries. Section 402 (the Jackson-Vanik amendment) stipulates that communist countries not already receiving non-discriminatory tariff treatment at the time of the Act's entry into force will be ineligible for bilateral commercial agreements, Most-Favored-Nation (MFN) tariff treatment, and official export credits and investment guarantees unless those countries permit free emigration. The President may waive this requirement if such a waiver and subsequent extension of MFN have the effect of improving emigration flows in the given countries. If MFN is extended under this clause, the annual extension of the President's waiver authority is subject to review by both Houses of Congress. The GDR currently does not receive MFN treatment for its exports to the United States and is not eligible for Exim and CCC credits.

About $2.1 billion or 20 percent of 1980 GDR commercial debt was owed to the FRG. Another $1.5 billion or 14 percent was held by U.S. banks, with most of the remainder held by Japanese, French, and other West European creditors.

In recent months many Western commercial banks have reacted to mounting East European financial problems and heightened East-West tensions by sharply scaling back credits for all East European borrowers. Presumably the GDR has not been unaffected by the cutback in Western credit, although a precise assessment of the impact is difficult in view of the lack of data on GDR reserves, repayment schedules, etc. However, according to data from the Bank for International Settlements (B.I.S.), over 40 percent of GDR commercial debt has a maturity of one year or less, and thus must constantly be rolled over with new credits. Any sizable scaling back of Western credits is therefore likely to affect the GDR's financial position.

Obviously, the longer the current East European credit "drought" continues, the more difficult it will be for the GDR to service past debts while maintaining present import levels. The GDR could possibly be forced to adopt painful austerity measures, including import cutbacks and a scaling back of growth targets. Assessment of the GDR's hard currency position, however, must take into account the sizable amounts of hard currency received from the FRG in payment for road, rail, postal, and other links to West Berlin and as gifts from West Germans to relatives and friends in the GDR. GDR hard currency income from such sources has been estimated at over $1 billion annually, and has perhaps been a factor in allowing the GDR to run consistently large-trade deficits with the West in recent years.

III. GDR Hard Currency Trade Objectives and Strategy: 1981–85

During the 1980s, the GDR faces growing economic pressures due to fuel and raw material price increases, a mounting labor shortage, and rising consumer demands. The approximately ten percent reduction of Soviet oil deliveries recently enacted also threatens to create a major energy shortage by the mid-1980s, unless energy consumption is curtailed and alternative energy sources (e.g., lignite, nuclear power) are developed rapidly. (Between 1975 and 1980 increases in annual deliveries of Soviet oil covered 70 percent of the growth in GDR energy consumption). The resolution of GDR economic problems, moreover, must take place within an unfavorable international situation, marked by uncertainty over the future course of East-West relations and growing tensions within Eastern Europe.

The GDR leadership has opted to tackle its economic challenges through a policy of accelerated economic growth, in contrast to the reduced-growth policies adopted by other East European countries facing similar circumstances.

The Directives for the 1981–85 Plan, approved at the Party Congress in April, and enacted into law by the People's Assembly in December 1981, call for national income and industrial output to grow by an average of 5.1–5.4 percent per year, compared with actual increases of 4.1 percent and 4.7 percent respectively during 1976–80. Most of the targeted output growth is to be achieved through "intensification"—i.e., improvements in efficiency and productivity leading to increased production from the same or reduced quantity of fuels and raw materials. Investment, on the other hand, will be more restrictive with total investment outlays planned to grow only about 2 percent per annum compared with a 4.8-percent annual rate in 1976–80.[3]

A. OBJECTIVES

The major objectives of the Plan are:

Increased labor productivity to combat a growing labor shortage;

More efficient use of fuels and raw materials, including substitution of domestic lignite for oil as a heating fuel and chemical raw material;

Improved availability and assortment of high quality consumer goods and food products for domestic consumption;

Expanded exports to major trading partners to balance trade and repay indebtedness. (Exports to socialist countries are to increase 50-percent by 1985. No target is provided for exports to the West).

Crucial to success in each of these areas is the expectation of accelerated scientific and technological development, which the technocratically-minded GDR leadership views as the key to improving efficiency and coping with foreign trade burdens. Aside from boosting labor productivity by 5 percent or more per year, faster technological innovation is expected to reduce fuel and raw material usage and generate increased exports of sophisticated manufactured products to CMEA and Western markets. Target areas include micro-processors, industrial robots (40–50,000 robots are to be introduced during the Plan), fiber optics, lasers, process control, and nuclear engineering.

The top priority hard currency trade objective implicit in the 1981–85 Five-Year Plan is the elimination of the GDR trade deficit with the West, averaging $1.5 billion per year since the mid-1970's. The Plan calls for greatly intensified export promotion efforts by combine managers and foreign trade officials. Specific goals include more punctual fulfillment of delivery targets, improved product quality, and better after-sales service.

Alongside intensified export development efforts, the GDR will likely place tighter limitations on imports for hard currency. Measures will be taken to replace wherever possible Western imports of raw materials and industrial commodities with products obtained through the GDR's rapidly expanding trade ties with the LDC's. We also expect a delay or stretching out of negotiations for major capital equipment purchases from Western suppliers, and stepped up pressure for payback through counterdeliveries of GDR products.

Recent months have also seen increasingly frequent calls for the reduction and eventual elimination of grain imports from the West through greater domestic production and improvements in the efficiency of grain and feed utilization. GDR Party chairman Honecker remarked at the November 1981 Central Committee Plenum that "one can today absolutely equate the grain problem in rank with the oil problem."[4] "Intensificaton" techniques developed for industry—e.g., mechanization, rationalization, waste recycling, etc.—are being applied to agricultural producers in the hopes of achieving greater meat and dairy output from the same or reduced volume of inputs. Progress toward this goal, however, will likely be very gradual. Barring a politically risky decision to reduce meat production, grain import levels will probably remain at the present 3.0–3.5 million MT per year at least through 1985.

---

[3] See Doris Cornelsen. "Main Task Export—The Directive on the 1981–1985 Five-Year Plan for the GDR Economy." *DIW-Wochenbericht,* Vol. 48, No. 31, July 30, 1981.

[4] *Neues Deutschland*, Nov. 20, 1981.

Within the available hard currency resources, the acquisition of advanced Western technology, equipment, and manufacturing processes will remain an important GDR objective in trade with the West through the mid-1980s. Although the GDR will continue to provide the bulk of its requirements for machinery and technology, selected purchases of Western electronic gear, machinebuilding and chemical equipment, automation devices and other equipment will play an important role in industrial modernization. Turnkey plant purchases, however, the principal channel of technology acquisition during the 1970's, will likely be deemphasized. In their place, the GDR may make expanded purchases of production lines and complexes and individual machinery items for use in the modernization of existing production facilities. Capital equipment imports not offset by counterpurchases of GDR products or not directly related to an increase in GDR export capabilities are likely to be sharply scaled back.

An additional foreign trade objective is likely to be a further diversification of GDR-Western trade in order to lessen risks of political and economic dependence on the FRG. The FRG is presently the GDR's second largest foreign trade partner, accounting for approximately 8 percent of total GDR foreign trade and 50 percent of trade with the West. Although its extensive economic ties with the FRG provide important benefits, the GDR can be expected to intensify efforts to promote trade with Japan, France, the United States, and other Western countries.

B. CONSTRAINTS

Achievement of the GDR's ambitious economic objectives for the 1981–85 period is constrained by a series of factors, most notably the extremely slow planned investment growth. The planners have sought to compensate for the paucity of investment resources by encouraging the reconstruction of existing facilities and more rapid completion of on-going investment projects. Emphasis is also being placed on expanded "in-house" production of rationalization aids by enterprises and combines, expected to provide one quarter of total industrial investment by 1985 versus about 16 percent at present. However, if key industries are deprived of adequate investment resources for a sustained period, serious bottlenecks could develop threatening the entire intensification program.

Economic growth could also be seriously impaired if the Soviet Union carries out its reported intention to reduce oil deliveries to Eastern Europe by 10 percent or more below 1980 levels. For the GDR a 10 percent cut would amount to a loss of 1.9 million metric tons per year (38,000 barrels per day), equivalent to total current imports from all non-communist sources. The GDR may find it difficult to buy this quantity of oil from other world market suppliers.

Other constraints on fulfillment of the 1981–85 Plan targets include:

Heavy export commitments to CMEA countries, caused by price increases for oil and raw materials;

Growing domestic consumer demands, which rule out diversion of large quantities of goods from internal consumption to exports;

Expected slow economic growth in the West causing reduced demand for GDR exports;

Competition from Third World producers in Western markets for intermediate goods and consumer products; and

GDR refusal to permit expanded industrial cooperation such as joint ventures with Western firms on GDR property. (Joint ventures, co-production deals, etc. in third countries are actively sought by GDR foreign trade officials).

Unless the above constraints are overcome by extraordinary efficiency improvements generated by flexible and innovative management of the industrial combines, GDR economic performance and export results on Western and Eastern market could fall below expectations during the early-mid 1980s. The leadership would then face an extremely difficult choice between continuing the present economic program through an expansion of overseas debt (assuming credit is available), or scaling back the current economic targets so as to bring imports in line with export capacities. The latter policy would result in a futrher lowering of capital goods imports from the West and a scaling back of aggregate economic growth rates. Also implicit would be reduced levels of housing construction and stagnation in consumption levels.

IV. GDR Import Needs From the Industrialized West, 1981–85

From 1975 through 1979, GDR imports from the Industrialized West expanded at an annual rate of 14 percent to $4.9 billion (see Table A–6). The GDR was the second largest East European import market for the Industrialized West, behind only Poland ($1.6 billion). In 1980 imports grew a modest 9 percent to $5.4 billion, as import curbs enacted at the December 1979 Central Committee Plenum took effect.

The FRG was the dominant Industrialized Western exporter, providing 55.5 percent of total Industrialized Western exports in 1974–79 (Table A–7). The United States was in second place with 8.9 percent, followed by France (5.5 percent), Sweden (4.4 percent), and the Netherlands (4.3 percent). Due to a 5-fold jump in exports, Japan became the fourth largest Industrialized Western exporter to the GDR in 1979, providing 5.5 percent of the Industrialized Western total.

Intermediate goods (SITC 5 and 6) were the largest import grouping in 1975–79, comprising roughly 40 percent of the total (Table A–6). Finished manufactures (SITC 7 and 8) were next with about 30 percent, followed by primary products (SITC 0–4) with 26 percent.

Deficit-reduction measures instituted in the mid-1970's were moderately successful in curbing imports of intermediate goods (chemicals, steel, non-ferrous metals, textiles). However, large turnkey plant and machinery orders, combined with heavy grain purchases and escalating prices for imported petroleum resulted in steady increases in finished manufactures and primary products imports.

The campaign to balance GDR-Industrialized West trade will likely result in significantly lower growth in nearly all categories of imports during the 1981–85 period. The sharpest growth cutback will likely occur in imports of machinery and transport equipment, projected to grow only 12 percent per year in 1981–85 versus nearly 22 percent per year in 1974–79. Significantly lower growth is also expected in the value of grain and mineral fuel imports, the latter based on expectations of slower oil price rises than in recent years.

Assuming the availability of adequate financing, we expect GDR imports from the West to grow at a 9.8 percent average annual rate $8.6 billion per year by 1985 (Table A–10). Factoring in an expected inflation rate of roughly 8 percent per year, real import growth is likely to be on the order of about 2 percent per year, well below the 5.0 percent targeted rise in real national income and industrial output.

The following paragraphs provide a brief overview of the major import categories and growth prospects through 1985.

Foodstuffs.—Foodstuffs imports—chiefly grain and livestock feed—have been instrumental in boosting meat and dairy supplies to the population, a cornerstone of GDR welfare policy. In 1975–79, imports ranged from $500–840 million per year, supplied mainly by the United States and the FRG.

Despite recent exhortations to reduce dependence on imported grain, the GDR will still need to import 3.0–3.5 million metric tons of grain and 1.0 million MT of soybean meal each year to achieve modest planned increases in meat production. CMEA suppliers (Hungary, U.S.S.R.) will be called upon to provide about 1.0 million MT of grain, leaving the remainder to come from the Industrialized West. If prices continue to rise by 10 percent per year, the value of foodstuffs imports could reach $1.5 billion per year by 1985, including about $1.0 billion in grain and livestock feed. Imports could go considerably higher given GDR harvest shortfalls or reduced imports from CMEA countries, as occurred in 1980.

Mineral Fuels.—Since the mid-1970's the GDR has engaged in a highly profitable fuel trade with the Industrialized West, based mainly on imports of Middle Eastern crude oil from FRG middlemen and exports of refined oil products to West Berlin and other West European destinations. In 1979 the GDR imported from the FRG about 1.0 million metric tons of crude oil worth $190 million and in return shipped to Industrialized Western markets $740 million of refined oil products, including 2.1 million MT of diesel fuel, gasoline, and heating oil to West Berlin, valued at $590 million. Between 1975 and 1979 net GDR earnings from oil trade with the Industrialized West quadrupled to $550 million annually, due to higher export volumes and the more rapid runup in refined oil prices compared with prices for imported crude.

The GDR profit margin shrank considerably in 1980 as crude prices jumped nearly 50 percent while petroleum product prices rose only 9 percent. Through expanded volume shipments, though, the GDR was able to boost oil exports to the Industrialized West 74 percent to $1.2 billion, generating net oil earnings of $930 million. (In both 1979 and 1980 refined oil exports accounted for 40–45 percent of the total growth in GDR exports to the Industrialized West).

Aside from oil, the GDR also imports hard coal from the Industrialized West, mainly the FRG. From $50 million annually in the mid-1970's, coal imports jumped to $160 in 1979 and $146 million in 1980. Hard coal imports are partially offset by shipments of lignite and lignite briquettes to the FRG, totalling $55 million and $91 million in 1980.

According to the GDR–FRG Energy Agreement signed in September 1979, the volume of oil and oil products traded will remain at 1979 levels through 1985. GDR coal imports from the FRG, set in the Agreement at DM 250 million annually (currently $115 million) were raised to DM 450 million ($205 million) in March 1981 in order to make up for declining shipments from Poland. Based on these commitments, and assuming only moderate oil price increases, we expect GDR imports of mineral fuels from the Industrialized West to reach approximately $650 million per year by 1985, with crude oil accounting for about $425 million and hard coal the remainder. Imports, of course, could go considerably higher if oil prices once again accelerate, or give a decision to make up for cutbacks in Soviet oil and/or Polish hard coal deliveries through purchases from Industrialized Western suppliers.

Chemicals.—The GDR is Eastern Europe's largest chemical producer and the largest importer of chemicals, dyes, fertilizers and plastics from the West. Imports from the Industrialized West totalled $750 million in 1979, 50 percent higher than in 1975. Three-quarters of GDR chemical imports from the Industrialized West come from the FRG.

With the commissioning of large new facilities, such as the Japanese-built aromatics complex at Schwedt, imports of benzene and other bulk chemicals from the West should taper off considerably. All or part of the cutback in bulk chemicals, however, may be offset by expected increases in imports of low-bulk, high-value items such as plastics, dyes and resins, causing the overall import volume to remain the same or even increase somewhat through the mid-1980's. Factoring in price increases of 8–9 percent per year, the value of chemical imports from Industrialized West suppliers is estimated to reach approximately $1.24 billion annually 1985.

Semi-finished industrial goods.—At $1.2 billion, semi-finished industrial goods accounted for one-quarter of 1979 GDR imports from the Industrialized West, making this the largest one-digit SITC import category. The major products imported were iron and steel, textiles, and non-ferrous metals. Imports have played an important role in compensating for GDR production shortfalls and slowing deliveries of industrial inputs from the U.S.S.R. After increasing very slowly in the mid-1970's, semi-finished imports jumped 18 percent in both 1978 and 1979, led by higher purchases of steel, textiles, and a doubling of silver imports.

Imports of semi-finished industrial goods from Industrialized West suppliers are projected to increase 8.5 percent per year to $2.0 billion annually by 1985. Most of the growth is expected to be in textiles and non-ferrous metals, reflecting expanded clothing production for internal and export markets, and increased consumption of silver, copper, platinum and other metals by the rapidly growing electronics industry. Iron and steel imports, on the other hand, should decline over the next several years as new steel mills come on stream and metal recycling programs gather momentum.

Machinery and transport equipment.—The GDR is the second largest East European importer of machinery and transport equipment from the Industrialized West. In 1975–79, imports rose 22 percent per year to $1.3 billion, comprising 27 percent of 1979 imports from the Industrialized West. The major share of imported Western plant and equipment was taken by the chemical, metallurgical, machinery, and transport industries. Also significant were imports of computers, electronic controls, railway cars, and printing and textile machinery.

During the 1981–85 Plan, machinery imports from the Industrialized West will be tightly constrained by deficit-reduction measures. Imports of selected Western equipment and technology—particularly computer technology, industrial robots, automation devices, and advanced chemical and metallurgical equipment—will nonetheless be needed for continued modernization of key industries. Preference will be given to deals involving large counterpurchases of GDR products or enabling an expansion of GDR export capacity. Imports of complete industrial plants are likely to be cut back significantly in favor of purchases of individual equipment items and assembly lines. In our estimate, the GDR will try to hold the growth of machinery and transport equipment imports from the Industrialized West to about 12 percent per year in 1981–85, nearly 10 percentages points lower than during 1974–79. At this rate imports would total a still-appreciable $2.6 billion per year by 1985.

Miscellaneous manufactured goods.—The GDR has been the largest East European importer of miscellaneous manufactures from the Industrialized West. Since 1978 imports have risen 25 percent per year to nearly $200 million. Consumer goods, mainly shoes and clothing, were the largest import segment, followed by medical and scientific instruments, optical equipment, and other precision manufactured products.

In 1981–85, import growth in miscellaneous manufactures will likely be reduced to about 10 percent per year, with the emphasis on imports of instrumentation and control equipment. Despite the intention to improve living standards, the GDR will probably forgo large imports of Western consumer articles in order to conserve scarce hard currency. Our estimates are for imports of miscellaneous manufactures to reach $350 million per year by 1985.

V. GDR EXPORT CAPABILITIES TO THE INDUSTRIALIZED WEST: 1981–85

From 1975 through 1979, GDR exports to the 17 Industrialized Western countries expanded an average of 13.2 percent per year, about one percentage point slower than imports from the Industrialized West. (Table A–8.) Since 1978, exports have accelerated to a 20 percent annual growth rate, reaching $5 billion in 1980. Sharply higher prices for refined petroleum products accounted for a large part of the recent export acceleration, but credit must also be given to stepped-up export promotion efforts by the newly-formed industrial combines.

As with imports, GDR exports contain a high proportion of intermediate goods (SITC 5–6), comprising 35 percent of the 1979 export total. Primary products (SITC 0–4) made up another 34 percent, based largely on refined oil shipments. Finished manufacturers (SITC 7–8) comprised 29 percent of Industrial Western-bound exports in 1979, the highest proportion of finished manufactures exported by any East European country. Finished manufactures exports, though, consist largely of consumer goods. Exports of machinery and transport equipment, while highest in Eastern Europe, comprised only 11 percent of 1979 exports to the Industrialized West, compared with over 50 percent of GDR exports worldwide. This illustrates the more difficult problems encountered in penetrating highly competitive Western machinery markets.

Through the mid-1980's we expect intermediate goods exports (chemicals, steel, textiles) to pick up as large turnkey plants purchased from the West in the late-1970's come on stream. Moderating prices and expected reductions in the volume of refined oil shipments, however, imply significantly slower growth in mineral fuel exports. Manufactured goods will thus probably be the determining factor in the overall export outlook. Although technological advances, improved product quality, and greater flexibility in responding to demand patterns should enhance the marketability of GDR manufactured products in the West, the GDR's heavy export commitments to its CMEA partners and expectations of sluggish Western economic conditions preclude dramatic growth in this sector. Our projections, therefore, call for exports to accelerate only moderately, reaching $8.6 billion per year by 1985.

Foodstuffs.—Exports of foodstuffs—three-fourths of which go to West Berlin—have stagnated at about $400 million per year since 1975, while their share of exports has fallen from 17 percent to 10 percent in 1979. A primary cause has been a decline in live animals exports due to EEC import restrictions. Cereals exports have also failed to recover from a drought-induced drop in 1977, while meat exports have stagnated due in part to rising domestic consumption.

Given expected slow gains in meat and grain output, coupled with rising domestic food consumption and continued Western import barriers, only modest gains of about 9 percent per year, due mainly to price increases, are likely in GDR foodstuffs exports through the mid-1980s. By 1985, exports might be averaging $670 million annually, thereby contributing little to the much-needed growth in hard currency earnings.

Mineral fuels.—Mineral fuels are one of only two sectors in which the GDR enjoys a positive trade balance with the Industrialized West. Between 1975 and 1979 rapid oil price rises and volume increases boosted mineral fuel exports to West Berlin and other Industrialized Western markets by an average of 25 percent annually to $800 million, producing net hard currency earnings in 1979 of $440 million. Fuel exports rose an additional 61 percent in 1980 to nearly $1.3 billion, yielding net hard currency earnings of $800 million. Practically the entire 1980 export increase was due to higher oil export volumes which rose 53 percent to an estimated 4.0 million MT. (GDR oil export prices gained only 9 percent in 1980). In both 1979 and 1980 mineral fuels provided over 40 percent of the growth in GDR exports to the Industrialized West, increasing to 26 percent of the export total.

Assuming the Soviet Union cuts crude oil deliveries 10 percent to 17 million MT per year, the GDR's imports of Soviet oil in 1981–85 would total 86–87 million MT, about 2–3 percent below the quantity imported in 1976–80. Conservation and greater substitutions of lignite could offset a portion of this cutback. However, short of draconian measures it is difficult to see how total domestic oil consumption could be kept from increasing over present levels, especially in view of planned increases in output and/or exports of a range of petroleum-based products (petrochemicals, plastics, synthetic fibers, clothing, etc.). Consequently, the GDR will likely be unable to maintain the 1980 oil export volume to the Industrialized West throughout the entire Plan period. Assuming shipments decline to 3.5 million MT, 15 percent lower than in 1980, and factoring in relatively moderate (5 percent) annual price rises, refined oil exports to the Industrialized West might total $1.4 billion per year by 1985, up only 10 percent over 1980. With increased volumes and higher prices for exports of lignite briquettes, total exports of mineral fuels could reach about $1.6 billion annually by 1985. Assuming, per earlier estimates, imports of mineral fuels worth $650 million, net earnings would approach $950 million annually by 1985, 20 percent higher than in 1980.

The earnings picture could deteriorate quickly, though, if the GDR is forced to make sharper cuts in Industrialized Western oil exports, or import substantially more crude oil from the FRG to make up for slumping deliveries from the U.S.S.R. Given the disastrous impact this would have on the GDR trading balance, however, such a step is likely to be taken only as a last resort.

Chemicals.—At $425 million in 1979, GDR chemical exports to the Industrialized West were twice as large as those of its closest CMEA competitor. Chemical elements, mainly organic chemicals, fertilizers, and plastics, have been the major export products. In each instance, export capacity has recently been boosted by the commissioning of new Western-built turnkey plants.

Rising prices, increased domestic output, and growing compensation shipments from facilities about to enter production should enable GDR chemical exports to grow by at least 15 percent annually through 1985, versus 13 percent per year 1975–79. Exports would thus be averaging $1.0 billion annually by 1985, compared with chemical imports worth an estimated $1.25 billion per year. This prognosis, of course, is contingent upon maintenance of adequate supplies of chemical feedstocks, through stepped-up oil conservation efforts and expanded usage of lignite as a heating fuel and chemical raw material.

Semifinished industrial goods.—At $1 billion, this was the GDR's largest one-digit SITC export category in 1979, accounting for one-quarter of exports to the Industrialized West. Paced by recent increases in steel, non-ferrous metals, textiles, and mineral manufactures (i.e., glassware), exports rose an average 13 percent per year in 1975–79.

Exports should exceed this pace through the mid-1980's. Steel export capacity, for example, will increase markedly within the next few years as new and reconstructed steel mills enter production. This will boost exports of higher quality steel products, enabling the GDR to compete better with Japanese and Third World producers. Rising prices should also increase non-ferrous metals earnings even if quantities remain unchanged. Glassware and textiles, meanwhile, should also post gains given the GDR's high reputation for quality.

Assuming a 15 percent annual growth rate, semi-finished industrial goods exports might reach $2.35 billion annually by 1985. If our import projections are correct, semi-finished goods would become a net hard currency earner by 1985.

Machinery and transport equipment.—Deficiencies in design, marketing, and service have held GDR machinery exports to Industrialized Western markets below their estimated earnings potential. In 1975–79 exports advanced an average of 10.7 percent per year, 2.5 percentage points slower than all Industrialized Western-bound exports. Non-electric machinery, including pumps, valves, machine tools, printing and textile machiery, was a recent bright spot in the export picture, increasing an impressive 29 percent in 1979. The GDR also exports significant quantities of electrical equipment (motors, power equipment, medical apparatus) and transport equipment (railway cars, ships and boats), although recent gains have not been nearly as large.

Future export performance depends largely upon success in raising the technological level of GDR machinery items and improving overseas sales and service mechanisms. Current efforts to accelerate development and application of microprocessor technology, and the consolidation of production, R&D, and export promotion activities within the industrial combines are steps in the right direction. The combine system has also aimed at achieving a speedier and more flexible response by manufacturers and export managers to overseas market conditions, a major weakness of GDR export efforts in the past.

On the negative side, however, the quantities of machinery available for export to the West will be constrained by growing export commitments to the U.S.S.R. and other CMEA countries, needed to offset sharply higher prices for energy and raw materials imports. In light of this factor, we foresee a relatively modest acceleration in machinery and equipment exports to an average of 14 percent per year. Machinery exports would thus be averaging approximately $1.0 billion annually by 1985, compared with imports projected at $2.6 billion annually.

Miscellaneous manufactured articles.—Products in this category, mainly clothing, furniture, toys and other basic consumer articles, have consistently been a net hard currency earner for the GDR. In 1979, exports totalled $730 million, over $500 million larger than imports from Industrialized Western suppliers.

The GDR sells between 70 and 90 percent of its Industrialized West-bound clothing and miscellaneous manufactured exports to the FRG. In order to diversify its export markets, the GDR has been slowly building a marketing base elsewhere in Western Europe and Japan, but is likely to encounter stiff competition from entrenched Third World producers. Exports to Western markets are also limited by the need to ensure adequate supplies for domestic consumers, in order to maintain work incentives and guard against erosion of political support. Improved marketing skills, plus the addition of more sophisticated, higher quality items to the product mix, however, should be sufficient to boost exports by 15 percent per year to about $1.7 billion per year by 1985. Assuming $350 million in imports, net hard currency earnings from miscellaneous manufactured goods could approach $1.4 billion annually by 1985, offsetting much of the large deficits expected in the machinery sector.

VI. PROJECTED 1985 TRADE WITH INDUSTRIALIZED WEST

Per our estimates, GDR-Industrialized Western trade turnover is projected to total $17.2 billion annually by 1985 approximately 65 percent higher than in 1980. (Table A-10). Assuming adequate financing is available, GDR imports are projected to grow just under 10.0 percent per year to $8.6 billion. Exports are projected to reach the same amount based on annual growth of 11.5 percent per year over 1980 levels. Cumulative export growth is projected to be 72 percent over 1980 compared with a 62 percent rise in imports. The GDR would thus balance its trade with the Industrialized West in 1985.

In view of the constraints on GDR export capabilities and Western import demand, efforts to balance trade much before 1985 would probably require sharp curbs on imports from Industrialized Western suppliers. Sizable import reductions, moreover, would have to be accompanied by a shift toward slower aggregate economic growth, since otherwise the reduced availability of Western industrial goods and capital equipment would hamper production of a wide range of key manufactured goods.

VII. U.S.-GDR TRADE POTENTIAL THROUGH 1985

A. CONSTRAINTS ON U.S.-GDR TRADE

Under current U.S. legislation the GDR does not receive MFN treatment for its exports to the United States and is not eligible for EximBank and Commodity Credit Corporation (CCC) credits. Lack of MFN is a constraint on GDR exports to the United States owing to the high proportion of manufactured goods in the export composition. The GDR could compensate to a degree by shifting its exports towards less highly finished products (steel, chemicals, plastics, etc.) which carry significantly lower non-MFN duties. The potential gains from such a strategy, however, would be offset in part by higher transport costs and the loss of sales to established West European customers.

The lack of Exim credits for the GDR affects the ability of U.S. exporters to compete with West European and Japanese firms for major GDR turnkey plant and equipment projects. Most competitor firms have access to government backed export credits at lower than commercial rates and thus are able to offer lower financing costs than American companies, often a key consideration in contract negotiations. The lack of CCC support for U.S. agricultural exports to the GDR results in higher prevailing market interest rates for short-term grain financing of these exports.

U.S. exports to the GDR are subject to provisions of the Export Administration Act of 1979 as amended. Under this law export controls administered by the U.S. Department of Commerce are imposed for national security, foreign policy, or short supply reasons. Validated export licenses are required for a wide variety of sensitive products, including many high technology items and data.

B. POTENTIAL VOLUME AND COMPOSITION ON U.S. EXPORTS TO THE GDR

Growth in U.S.-GDR trade in 1981–85 will depend primarily on increased trade in non-agricultural goods, in contrast to the post-1972 period when large increases in U.S. agricultural shipments provided the major growth dynamic. During the present Plan, GDR imports of grain and feed are expected to level off, and consequently increases in U.S. farm sales will depend mainly on future price increases and modest gains in the already high U.S. market share.

In the primary goods sector, there is major untapped potential for U.S. coal exports to the GDR. Coal is the key to the GDR's efforts to reduce oil consumption. Although the major thrust is on domestically produced lignite, GDR hard coal imports from the West are increasing, in part to compensate for slumping deliveries from Poland and other CMEA suppliers. The GDR imported $6.0 million of U.S. coal during the severe winter of 1979, and additional purchases seem likely during 1981–85.

In chemicals and semi-finished goods, expected to comprise nearly 40 percent of GDR imports from the Industrialized West through 1985, U.S. export prospects are diminished by high transport costs and strong competition from other Western suppliers. Most U.S. chemical sales to the GDR will probably continue to be sourced from European-based subsidiaries. High transport costs also tend to rule out large U.S. exports of industrial commodities (cement, wood products, building materials, etc.), while the U.S. export position in iron and steel—a major GDR import need—is relatively weak.

Export opportunities in manufactured goods, however, should be spurred by the GDR's ambitious plans to boost productivity and energy conservation. Instrumentation, process control equipment, medical technology, robotics and similar products should enjoy the most favorable sales prospects. Export opportunities for equipment and technology to produce consumer goods may also be promising, as indicated by the recent purchase of color-TV picture tube plants from the Japanese, utilizing some U.S. technology. Any major contracts awarded will likely embody stiff compensation trading provisions.

C. POTENTIAL VOLUME AND COMPOSITION OF GDR EXPORTS TO THE UNITED STATES

In recent years GDR exports to the United States—almost exclusively manufactured goods—have risen between 10 and 20 percent per year, albeit from a relatively small base. Assuming continuation of the present trading framework, we expect GDR exports to expand at about the same pace through the mid-1980s.

Industrial equipment—printing machinery, machine tools, textile machinery, typewriters, etc.—will probably continue to comprise the bulk of GDR export sales in the United States. Moderate increases can also be expected in selected consumer goods—glassware, porcelain, musical instruments. Elsewhere in the consumer sector—e.g. clothing, footwear, etc.—lack of MFN and competition from other suppliers will probably rule out major export gains.

Aside from potassium fertilizers, mink fur skins, and selected food items (beer, wine, chocolate), GDR export capabilities to the U.S. in non-manufactured goods are relatively limited.

VIII. PROJECTED U.S.-GDR TRADE UNDER ALTERNATIVE SCENARIOS

Two scenarios have been constructed to project U.S.-GDR trade through 1985. Each scenario assumes continuation of the present legislative framework for trade.

A. LOW-RANGE ESTIMATE

Under this scenario the volume of U.S. grain exports is assumed to remain about the same as in 1980 while prices are assumed to rise 10 percent per annum. U.S. manufactured exports are assumed to rebound to their 1979 level of $25 million. U.S. imports from the GDR are projected to increase 10 percent per annum (table A–11).

The low-range scenario results in a 70 percent increase in U.S.-GDR trade over 1981 to $700 million per year. U.S. exports are projected to reach $620 million per year. Agricultural products valued at $580 million would comprise 94 percent of total U.S. exports. Manufactured exports, valued at $24 million, would be 160 percent higher than in 1981. Non-agricultural, non-manufactured exports are projected to reach $16 million, including $10 million of coal. U.S. imports from the GDR are projected to reach $80 million, 88 percent of which would be manufactured goods.

Under this scenario, the U.S. share of projected 1985 Industrialized Western exports to the GDR would fall to 7.2 percent from 10 percent in 1980. The United States would likely fall to third or fourth place among Industrialized Western exporters to the GDR. The U.S. share of Industrialized Western imports from the GDR is projected to fall to 0.9 percent.

B. HIGH-RANGE ESTIMATE

The high-range scenario assumes more vigorous efforts by the United States and the GDR to develop trade. U.S. agricultural exports are projected to increase 20 percent in volume over 1981, in addition to 10 percent annual price increases. U.S. manufactured exports are projected to rise 50 percent above their 1979 peak, while imports from the GDR are projected to grow 20 percent per year.

Under the high-range scenario, U.S.-GDR trade is projected to double over 1981 to $835 million per year. U.S. exports are projected to be 20 percent larger than in the low-range scenario, due primarily to an $80 million increase in agricultural shipments. Coal exports are projected to rise to $25 million per year. U.S. imports of $105 million per year would be 30 percent above the low-range scenario, due to a $20 million rise in manufactured goods.

Under the high-range scenario the U.S. would be supplying 8.5 percent of total Industrialized Western exports to the GDR while importing 1.2 percent of the Industrialized Western total.

APPENDIX

TABLE A-1.—GERMAN DEMOCRATIC REPUBLIC FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960–80

[Dollar amounts in millions]

	1960	Percent of total	1970	Percent of total	1974	Percent of total	1979	Percent of total	1980 [1]	Percent of total
Imports	$2,194	100.0	$4,923	100.0	$9,797	100.0	$19,150	100.0	$2,310	100.0
of which:										
U.S.S.R.	958	43.7	1,945	39.5	2,868	29.3	6,447	33.7	7,610	34.1
East Europe	496	22.6	1,246	25.3	2,443	24.9	5,350	27.9	(2)	--------
Developed countries	484	22.1	1,378	28.0	3,549	36.2	[1] 6,131	32.0	7,240	32.5
Less developed countries	90	4.0	182	3.7	533	5.4	887	4.6	1,100	4.9
Exports	2,207	100.0	4,647	100.0	8,903	100.0	17,300	100.0	20,100	100.0
of which:										
U.S.S.R.	924	41.9	1,742	37.5	2,814	31.6	5,898	34.0	6,756	33.6
East Europe	588	26.6	1,386	29.8	2,690	30.2	5,450	31.5	(2)	--------
Developed countries	446	20.2	1,078	23.2	2,658	29.9	[1] 4,244	24.5	5,647	28.1
Less developed countries	89	4.0	183	3.9	356	4.0	979	5.7	1,100	5.5

[1] Estimated by author.
[2] Not available.

Source: CIA Handbook of Economic Statistics, (ER 80–10452), October 1980.

TABLE A-2.—GERMAN DEMOCRATIC REPUBLIC HARD CURRENCY TRADE,[1] 1970–80

[Dollar amounts in millions]

	1970	1974	1975	1976	1977	1978	[2] 1979	[2] 1980	1976–80 average annual percent growth
Imports	$1,560	$4,082	$4,187	$5,234	$5,080	$5,300	$7,018	$8,340	14.8
Exports	1,261	3,014	3,062	3,643	3,557	4,145	5,223	6,747	17.1
Trade turnover	2,821	7,096	7,249	8,877	8,637	9,454	12,241	15,087	----------
Balance	−299	−1,068	−1,125	−1,591	−1,523	−1,446	−1,795	−1,593	----------

[1] Includes developed West and LDC's.
[2] Estimated by author.

Source: CIA, Handbook of Economic Statistics, (ER 80–10452, October 1980).

TABLE A-3.—UNITED STATES-GERMAN DEMOCRATIC REPUBLIC TRADE, 1974–81

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1981
U.S. exports	218.0	350.3	418.0	245.0	203.4	402.8	558.4	344.4
of which:								
Agricultural	214.3	343.7	411.5	240.1	187.3	370.1	534.2	333.0
Manufactured [1]	2.8	5.2	5.6	4.1	14.3	23.4	18.2	9.2
Other	.9	1.4	.9	.8	1.8	9.3	6.0	2.2
U.S. imports	14.1	11.3	13.6	16.8	35.1	36.4	43.4	47.7
of which:								
Agricultural	1.0	.6	.9	1.7	2.5	2.2	2.8	0.9
Manufactured [1]	11.7	9.3	11.8	14.2	30.3	31.0	385.0	45.0
Other	1.4	1.4	.9	.9	2.3	3.2	2.1	1.8
Trade turnover	232.1	361.6	431.6	261.8	238.5	439.2	601.8	391.7
Balance	+203.9	+339.0	+397.9	+228.2	+168.3	+366.4	+515.0	+296.3

[1] SITC 5–8.

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-4.—GERMAN DEMOCRATIC REPUBLIC HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1971	1975	1976	1977	1978	1979	1980
Commercial debt	855	4,485	5,043	6,140	8,200	9,100	11,200
of which:							
Owed to U.S. banks	(1)	(1)	740	1,168	1,363	1,390	1,356
Officially backed debt	553	703	813	1,005	850	1,200	1,400
Gross debt	1,408	5,188	5,856	7,145	9,000	10,300	12,600
Commercial assets	(203)	(1,640)	(809)	(986)	(1,200)	(1,900)	(2,200)
Net debt	1,205	3,548	5,047	6,159	7,800	8,400	10,400

[1] Not applicable.

Source: U.S. Government.

TABLE A-5.—GERMAN DEMOCRATIC REPUBLIC TRADE WITH 17 INDUSTRIALIZED WESTERN (IW) NATIONS AND THE UNITED STATES, 1974–79

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Imports from 17 IW	$2,543.8	$3,001.8	$3,278.0	$3,213.3	$3,727.1	$4,900.8
United States	$218.0	$350.3	$418.0	$245.0	$203.4	$402.8
U.S. share (percent)	8.6	11.7	12.8	7.6	5.5	8.[illegible]
European Community	$1,925.9	$2,162.6	$2,314.4	$2,435.8	$2,960.6	$3,591.[illegible]
European Community share (percent)	75.7	72.0	70.6	75.8	79.4	73.3
Of which:						
Foodstuffs	$427.3	$552.5	$701.4	$510.8	$605.8	$837.6
United States	$215.0	$343.7	$411.5	$240.0	$187.3	$370.1
U.S. share (percent)	50.3	62.2	58.7	47.0	30.9	44.2
European Community	$194.6	$188.5	$203.3	$220.1	$340.1	$381.5
European Community share (percent)	45.5	34.1	29.0	43.1	56.1	45.6
Manufactured [2]	$1,919.3	$2,096.0	$2,123.8	$2,253.8	$2,701.3	$3,353.2
United States	$2.8	$5.2	$5.6	$4.1	$14.3	$23.4
U.S. share (percent)	.1	.2	.3	.2	.5	.7
European Community	$1,588.1	$1,689.5	$1,799.3	$1,838.3	$2,250.9	$2,667.7
European Community share (percent)	82.7	80.6	84.7	81.6	83.3	79.6
High technology [3]	$54.4	$69.1	$74.9	$83.8	$103.5	$202.9
United States	$1.6	$1.1	$1.9	$1.2	$3.2	$7.1
U.S. share (percent)	2.9	1.6	2.5	1.4	3.1	3.5
European Community	$25.2	$29.6	$30.7	$42.8	$45.1	$47.7
European Community share (percent)	46.0	42.8	41.0	51.0	43.6	23.5
Exports to 17 IW	$2,150.2	$2,309.3	$2,524.9	$2,752.1	$3,237.2	$4,008.0
United States	$14.1	$11.3	$13.6	$16.8	$38.3	$39.8
U.S. share (percent)	.7	.5	.5	.6	1.2	1.0
European Community	$1,792.0	$1,920.5	$2,171.9	$2,385.4	$2,744.0	$3,470.8
European Community share (percent)	83.3	83.2	86.0	86.7	84.8	86.6
Trade turnover with 17 IW	$4,694.0	$5,311.1	$5,802.9	$5,965.4	$6,964.3	$8,908.8
Balance	−$393.6	−$692.5	−$753.1	−$461.2	−$489.9	−$892.8
Balance with United States	−$203.9	−$339.0	−$404.4	−$228.2	−$165.1	−$363.0
Balance with European Community	−$133.9	−$242.1	−$142.5	− $50.4	−$216.6	−$120.8

[1] SITC 0, 1, 4.
[2] SITC 5–8.
[3] Excluding Federal Republic of Germany exports to the German Democratic Republic.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF GDR IMPORTS FROM 17 INDUSTRIALIZED WESTERN (IW) COUNTRIES, 1974-79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1979 percent of total	Average annual growth (percent) 1975-79
Imports from 17 IW	2,543.8	3,001.8	3,278.0	3,213.3	3,727.1	4,900.8	100.0	14.0
Foodstuffs (SITC 0, 1, 4)	416.9	553.1	696.3	516.9	619.0	837.6	17.1	15.0
Cereals	159.5	290.8	438.4	183.6	268.1	378.0	---	---
Livestock feed	110.5	35.4	95.4	143.9	126.4	190.2	---	---
Meat, meat preparations	10.8	16.3	16.9	17.6	21.6	23.3	---	---
Sugar, sugar production, honey	2.2	15.5	20.5	27.5	48.2	50.2	---	---
Coffee, tea, spices	12.7	14.0	17.8	24.8	27.2	20.5	---	---
Beverages and tobacco	33.8	40.3	50.2	63.1	54.1	70.5	---	---
Animal/vegetable oils and fats	52.4	31.3	33.7	47.3	38.8	63.8	---	---
Other	35.0	109.5	23.4	9.1	34.6	41.1	---	---
Crude materials (SITC 2)	131.1	107.4	121.0	115.4	119.8	154.2	3.1	3.3
Metal ores and scrap	34.5	36.9	32.6	36.5	40.4	93.2	---	---
Pulp and paper	33.5	49.3	55.1	43.7	27.7	31.6	---	---
Other	63.1	21.2	33.3	35.2	51.7	29.4	---	---
Mineral fuels (SITC 3)	46.7	148.7	193.2	211.3	194.4	363.5	7.4	50.7
Crude petroleum	.1	90.7	130.2	149.8	121.8	190.3	---	---
Petroleum products	5.8	6.4	10.8	8.5	13.7	14.7	---	---
Coke, coal, briquettes	40.7	51.6	52.2	53.0	58.8	158.5	---	---
Chemicals (SITC 5)	468.4	508.7	476.9	483.5	606.1	752.8	15.4	10.0
Chemical elements and compounds	194.0	248.2	258.1	268.6	315.9	426.3	---	---
Organic	(152.2)	(175.1)	(195.8)	(189.3)	(199.8)	(297.2)	---	---
Inorganic	(41.8)	(73.1)	(62.3)	(79.3)	(116.1)	(129.1)	---	---
Plastic materials	87.3	72.7	71.3	70.7	97.1	125.6	---	---
Dyes, tanning products	46.2	55.0	59.5	51.1	74.7	75.4	---	---
Medical, pharmaceutical	22.2	26.2	25.2	25.1	33.9	50.2	---	---
Oils and perfumes	12.8	14.4	15.7	13.4	29.1	26.6	---	---
Fertilizers, manufactured	55.5	60.0	24.9	21.7	25.7	33.8	---	---
Other	50.4	32.2	22.2	32.9	29.7	14.9	---	---
Semifinished industrial goods (SITC 6)	847.6	869.9	838.7	881.6	1,038.3	1,225.0	25.0	7.6
Iron and steel	288.6	329.3	298.1	277.2	334.3	361.6	---	---
Textile fibers, yarn, fabric	203.2	175.3	183.8	189.4	205.8	250.5	---	---
Nonferrous metals	154.3	141.3	116.8	158.9	185.0	220.3	---	---
Metal manufactures	41.3	47.0	59.3	67.0	104.0	138.3	---	---
Rubber manufactures	40.9	37.7	32.4	32.1	43.0	44.5	---	---
Paper, board	44.7	50.6	33.7	46.6	49.7	67.5	---	---
Nonmetallic mineral manufactures	24.1	29.6	27.6	35.2	40.5	51.1	---	---
Other	50.5	59.1	87.0	75.2	76.0	91.2	---	---
Machinery and transport equipment (SITC 7)	492.2	647.1	808.6	809.7	923.4	1,323.4	27.0	21.9
Nonelectric machinery	372.8	431.3	530.9	590.0	684.0	892.1	---	---
Electric machinery	64.7	87.4	91.4	121.7	130.3	196.5	---	---
Transport equipment	54.7	128.4	186.3	98.0	109.2	234.7	---	---
Miscellaneous manufactured goods (SITC 8)	129.2	109.6	108.3	126.4	174.7	198.0	4.0	8.9
Clothing	36.7	31.0	21.3	24.5	48.9	44.9	---	---
Precision manufactured goods	24.5	25.1	22.5	24.6	34.4	53.3	---	---
Miscellaneous consumer articles	27.4	48.4	46.9	54.4	74.1	71.5	---	---
Other	40.6	5.1	17.6	22.9	17.3	28.3	---	---
Other	11.7	57.3	35.0	68.5	51.4	46.3	0	---

Source: U.N. trade data, magnetic tapes; and Federal Republic of Germany Statistical Office, Warenverkehr mit der DDR, Reihe 6, converted to SITC.

TABLE A-7.—INDUSTRIALIZED WEST (IW) EXPORT TRADE SHARES TO THE GERMAN DEMOCRATIC REPUBLIC, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$2, 543, 779	100. 0	$3, 001, 757	100. 0	$3, 277, 984	100. 0	$3, 213, 282	100. 0	$3, 727, 050	100. 0	$4, 900, 793	100. 0	$20, 664, 644	100. 0
Belgium-Luxembourg	58, 569	2. 3	74, 901	2. 5	76, 046	2. 3	81, 640	2. 5	69, 645	1. 9	95, 937	2. 0	456, 741	2. 2
Denmark	27, 869	1. 1	25, 353	. 8	33, 904	1. 0	29, 524	. 9	61, 913	1. 7	69, 914	1. 4	248, 177	1. 2
Federal Republic of Germany	1, 418, 502	55. 8	1, 593, 952	53. 1	1, 695, 274	51. 7	1, 899, 130	59. 1	2, 277, 656	61. 1	2, 570, 298	52. 5	11, 454, 812	55. 4
France	94, 725	3. 7	179, 842	6. 0	212, 648	6. 5	120, 890	3. 8	167, 060	4. 5	361, 696	7. 4	1, 136, 861	5. 5
Ireland	2, 271	. 1	933	0	962	0	2, 562	0	4, 432	. 1	2, 911	. 1	14, 077	. 1
Italy	82, 725	3. 3	88, 729	3. 0	82, 278	2. 5	80, 235	2. 5	135, 603	3. 6	160, 358	3. 3	699, 928	3. 0
The Netherlands	150, 230	5. 9	127, 474	4. 3	132, 878	4. 1	126, 782	4. 0	153, 269	4. 1	206, 799	4. 2	897, 432	4. 3
United Kingdom	91, 049	3. 6	71, 380	2. 4	80, 431	2. 5	95, 074	3. 0	91, 068	2. 4	123, 686	2. 5	552, 688	2. 7
European Community, subtotal	1, 925, 940	75. 7	2, 162, 566	72. 0	2, 314, 421	70. 6	2, 435, 837	75. 8	2, 960, 646	79. 4	3, 591, 599	73. 3	15, 391, 009	74. 5
Austria	88, 990	3. 5	115, 767	3. 9	99, 266	3. 0	103, 890	3. 2	122, 145	3. 3	169, 307	3. 5	699, 365	3. 4
Canada	3, 351	. 1	4, 199	. 1	46, 743	1. 4	29, 630	. 9	20, 650	. 6	30, 724	. 6	135, 297	. 7
Finland	28, 532	1. 1	43, 641	1. 5	63, 540	1. 9	65, 770	2. 1	55, 121	1. 5	91, 650	1. 9	348, 254	1. 7
Japan	45, 829	1. 8	48, 962	1. 6	48, 791	1. 5	42, 621	1. 3	58, 018	1. 6	268, 352	5. 5	512, 573	2. 5
Norway	59, 314	2. 3	48, 645	1. 6	36, 302	1. 1	69, 830	2. 2	36, 340	1. 0	26, 329	. 5	276, 760	1. 3
Sweden	113, 681	4. 5	155, 474	5. 2	165, 765	5. 1	131, 208	4. 1	160, 185	4. 3	173, 889	3. 6	900, 202	4. 4
Switzerland	60, 160	2. 4	72, 209	2. 4	85, 154	2. 6	89, 496	2. 8	110, 524	3. 0	146, 121	3. 0	53, 664	2. 7
United States	217, 982	8. 6	350, 294	11. 7	418, 002	12. 8	245, 000	7. 6	203, 421	5. 5	402, 822	8. 2	1, 837, 521	8. 9

TABLE A-8.—COMPOSITION OF GDR EXPORTS TO 17 INDUSTRIALIZED WESTERN (IW) COUNTRIES, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1979 percent of total	Average annual growth (percent) 1975–79
Export to 17 IW	2, 153. 9	2, 309. 1	2, 524. 9	2, 749. 7	3, 198. 2	4, 008. 0	100. 0	13. 2
Foodstuffs (SITC 0,1,4)	284. 2	388. 5	391. 2	330. 5	384. 0	398. 8	10. 0	7. 0
Live animals	103. 6	112. 0	131. 7	100. 9	138. 8	155. 8		
Cereals	58. 6	102. 7	82. 3	69. 5	97. 8	112. 4		
Meat and meat preparations	54. 2	72. 7	89. 0	47. 9	67. 7	29. 2		
Sugar, sugar products	30. 8	26. 1	29. 5	31. 5	38. 8	51. 8		
Beverages and tobacco	10. 0	25. 5	13. 2	14. 3	15. 6	19. 6		
Animal/vegetable oils and fats	21. 9	13. 0	14. 5	22. 3	9. 1	8. 5		
Other	5. 1	36. 5	31. 0	44. 1	16. 2	21. 5		
Crude materials (STIC 2)	136. 1	85. 8	87. 6	112. 4	119. 9	162. 2	4. 0	3. 6
Crude rubber	12. 9	13. 6	14. 2	17. 5	20. 0	24. 2		
Wood, lumber, cork	41. 4	34. 6	31. 9	29. 1	30. 4	32. 9		
Crude fertilizers	27. 2	23. 1	28. 6	32. 9	34. 5	51. 2		
Metal ores and scrap	13. 5	7. 4	8. 4	13. 5	11. 2	13. 2		
Other	41. 1	7. 1	4. 5	19. 4	23. 8	40. 7		
Mineral fuels (SITC 3)	264. 0	273. 9	339. 8	371. 7	430. 6	799. 1	19. 9	24. 8
Petroleum products	49. 7	228. 2	283. 8	302. 0	359. 1	730. 1		
Coke, coal, briquettes	213. 4	44. 5	51. 7	58. 9	61. 8	55. 5		
Other	. 9	1. 2	4. 3	10. 8	9. 7	13. 3		
Chemicals (SITC 5)	228. 7	250. 0	251. 1	280. 4	323. 5	425. 0	10. 6	13. 2
Chemical elements percent compounds	116. 8	126. 9	128. 0	129. 3	142. 5	193. 8		
Organic	(55. 5)	(64. 6)	(59. 2)	(63. 4)	(80. 0)	(110. 0)		
Inorganic	(61. 3)	(62. 3)	(68. 8)	(65. 9)	(62. 5)	(83. 8)		
Plastics	33. 6	26. 3	34. 8	44. 0	54. 7	69. 2		
Dyes, tanning products	2. 6	4. 7	6. 7	8. 7	10. 2	14. 1		
Fertilizers, manufactured	49. 5	54. 1	52. 1	62. 7	83. 5	112. 2		
Other	26. 2	38. 0	29. 5	35. 7	32. 6	35. 7		
Semifinished industrial goods (SITC 6)	538. 7	563. 6	646. 1	760. 0	831. 9	1, 008. 7	25. 2	13. 4
Iron and steel	173. 2	164. 2	166. 0	183. 9	209. 3	287. 9		
Texile fibers, yarns, fabrics	164. 5	169. 5	199. 1	205. 5	238. 2	234. 0		
Nonferrous metals	46. 4	43. 7	55. 0	103. 3	115. 9	180. 8		
Metal manufactures, NES	41. 6	33. 4	33. 4	39. 4	48. 5	60. 2		
Rubber manufactures	10. 3	15. 3	15. 8	20. 8	23. 8	25. 1		
Paper, board	28. 9	30. 1	40. 2	42. 1	48. 0	55. 6		
Nonmetallic mineral manufacturing	68. 9	77. 7	83. 5	96. 0	113. 6	135. 3		
Other	5. 8	29. 7	53. 1	69. 0	34. 6	29. 8		
Machinery and transport equipment (SITC 7)	270. 1	285. 6	323. 8	356. 0	430. 3	449. 2	11. 2	10. 7
Nonelectric machinery	111. 1	116. 4	118. 6	136. 9	159. 3	204. 3		
Electric machinery	98. 0	109. 6	126. 8	150. 2	170. 3	194. 6		
Transport equipment	61. 1	59. 6	78. 4	68. 9	100. 7	50. 3		
Miscellaneous manufactured goods (SITC 8)	392. 1	459. 6	471. 5	517. 2	659. 1	731. 5	18. 3	13. 3
Furniture	76. 5	97. 0	93. 8	119. 2	155. 1	188. 5		
Clothing	149. 9	193. 1	200. 2	223. 2	263. 0	262. 8		
Precision manufactured goods	36. 6	39. 3	49. 5	46. 7	54. 9	59. 8		
Miscellaneous consumer articles	99. 7	112. 1	117. 0	127. 7	156. 3	174. 5		
Other	29. 4	18. 1	11. 0	. 4	29. 9	45. 9.		
Other (SITC 9)	40. 0	2. 1	13. 8	21. 5	18. 9	33. 5	. 1	

Source: U.N. trade data, magnetic tapes; and Federal Republic of Germany Statistical Office, Warenverkehr mit der DDR, Reihe 6, converted to SITC.

TABLE A-9.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM THE GERMAN DEMOCRATIC REPUBLIC, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$2,150,164	100.0	$2,309,264	100.0	$2,524,858	100.0	$2,752,052	100.0	$3,237,169	100.0	$4,008,019	100.0	$17,217,042	100.0
Belgium-Luxembourg	65,045	3.0	81,094	3.5	94,231	3.7	90,390	3.3	107,553	3.3	133,401	3.3	571,714	3.3
Denmark	58,032	2.7	60,765	2.6	53,418	2.1	57,785	2.0	64,927	2.0	70,949	1.8	365,876	2.1
Federal Republic of Germany	1,256,859	58.5	1,358,493	58.8	1,539,595	61.0	1,706,004	62.0	1,941,601	60.0	2,502,592	62.4	10,305,145	59.9
France	125,391	5.8	163,403	7.1	187,475	7.4	160,785	5.8	223,321	6.9	216,018	5.4	1,076,393	6.3
Ireland	6,968	.3	4,885	.2	7,800	.3	9,130	.3	9,764	.3	13,726	.3	52,273	.3
Italy	94,973	4.4	86,943	3.8	93,667	3.7	89,407	3.3	101,632	3.1	161,886	4.0	628,508	3.7
The Netherlands	82,658	3.9	78,318	3.4	87,551	3.5	105,396	3.8	125,587	3.9	134,623	3.4	614,233	3.6
United Kingdom	101,990	4.7	86,577	3.8	108,150	4.3	166,544	6.1	169,613	5.2	237,565	5.9	870,439	5.1
European Community subtotal	1,792,016	83.3	1,920,478	83.2	2,171,887	86.0	2,385,441	86.7	2,743,998	84.8	3,470,760	86.6	14,484,580	84.1
Austria	72,334	3.4	70,169	3.0	74,603	3.0	85,948	3.1	97,632	3.0	118,505	3.0	519,191	3.0
Canada	7,159	.3	5,295	.2	5,018	.2	5,389	.2	6,467	.2	8,349	.2	37,677	.2
Finland	38,789	1.8	55,847	2.4	35,891	1.4	43,952	1.6	49,224	1.5	64,163	1.6	287,866	1.7
Japan	47,598	2.2	28,712	1.2	13,650	.5	17,745	.6	19,853	.6	27,754	.7	255,312	1.5
Norway	38,574	1.8	32,756	1.4	34,897	1.4	32,592	1.2	75,389	2.3	43,100	1.1	257,308	1.5
Sweden	112,829	5.3	161,546	7.0	154,568	6.1	139,571	5.1	138,877	4.3	201,666	5.0	909,057	5.3
Switzerland	26,736	1.2	23,211	1.0	20,699	.8	24,650	.9	31,473	1.0	33,961	.9	160,763	.9
United States	14,129	.7	11,250	.5	13,645	.5	16,764	.6	38,256	1.2	39,761	1.0	133,805	.8

TABLE A-13.—PROJECTED 1985 GDR TRADE WITH THE INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

	1979	1979 percent of total	Projected 1985	1985 percent of total	Projected average annual growth, 1980–85 (percent)
Imports from industrialized West	$4,900	100.0	$8,600	100.0	9.8
Foodstuffs (SITC 0, 1, 4)	838	17.1	1,500	17.4	10.0
Crude materials (SITC 2)	154	3.1	170	2.0	2.0
Mineral fuels (SITC 3)	364	7.4	650	7.6	10.1
Chemicals (SITC 5)	753	15.4	1,250	14.5	9.0
Semifinished industrial goods (SITC 6)	1,225	25.0	2,000	23.3	8.5
Machinery and transport equipment (SITC 7)	1,324	27.0	2,600	30.2	12.0
Miscellaneous manufactured goods (SITC 8)	198	4.0	350	4.1	10.0
Other	46	.9	80	.9	10.0
Exports to industrialized West	4,008	100.0	8,600	100.0	13.6
Foodstuffs (SITC 0, 1, 4)	399	10.0	670	7.4	9.0
Crude materials (SITC 2)	162	4.0	230	2.6	6.0
Mineral fuels (SITC 3)	799	19.9	1,600	22.2	12.3
Chemicals (SITC 5)	425	10.6	1,000	11.1	15.0
Semifinished industrial goods (SITC 6)	1,009	25.2	2,350	26.1	15.0
Machinery and transport equipment (SITC 7)	449	11.2	1,000	11.1	14.0
Miscellaneous manufactured goods (SITC 8)	732	18.3	1,700	18.9	15.0
Other	34	.1	50	.6	7.0
Trade turnover	8,909		17,200		
Balance	−892		+0		

TABLE A-11.—PROJECTED 1985 UNITED STATES-GERMAN DEMOCRATIC REPUBLIC TRADE UNDER ALTERNATIVE SCENARIOS

[In millions of U.S. dollars]

	1980	1981	1985	
			Low range	High range
U.S. exports	558.4	362.5	620	730
Agricultural	534.2	600.0	580	660
Manufactured[1]	18.2	3.5	24	40
Other	6.0	3.5	16	30
U.S. imports	43.4	47.5	80	105
Agricultural	2.8	.5	5	7
Manufactured[1]	38.5	44.5	70	90
Other	2.1	2.5	5	8
Trade turnover	601.8	410.0	700	835
Balance	+515.0	+315.0	+540	+625

[1] SITC 5–8.

HUNGARY: PERFORMANCE AND PROSPECTS IN TRADE WITH THE UNITED STATES AND THE WEST

By Thomas E. Moore

CONTENTS

Page

Summary 160

I. Hungarian Objectives and Performance in Trade During the 1970s 161
  1. Trade with the West 161
  2. Trade with the United States 162

II. Hungarian Hard Currency Debt 163

III. Hungarian Hard Currency Trade Objectives and Strategy: 1981–85 164
  1. Objectives and Constraining Factors 164
  2. Import Needs from the Industrialized West 164

IV. Hungarian Hard Currency Export Capabilities: 1981–85 167

V. Projected 1985 Hungarian Trade with the Industrialized West 169

VI. U.S.-Hungary Trade Potential Under Normalized Conditions 170
  1. Potential Composition and Volume of U.S. Exports to Hungary Under Normalized Trading Conditions 170
  2. Potential Composition and Volume of Hungarian Exports to the United States Under Normalized Conditions 171

VII. Projected 1985 U.S.-Hungarian Trade 171

Appendix. Tables A–1 through A–14 172

SUMMARY

Hungary's highest economic priority for the first half of the 1980s is to consolidate the recent improvement in the balance of trade. To accomplish this, Hungary intends to restrain imports and investment throughout the 1981–85 Five Year Plan period, while expanding upon the market-oriented reforms of the New Economic Mechanism to restructure the economy and increase economic efficiency. Greater caution can be expected in the implementation of more far-reaching reforms such as limited currency convertibility, price rationalization, and the reduction of ad hoc enterprise subsidies. The restraint in hard currency expenditures needed over the next several years to achieve the Hungarian Government's primary goal of a long term satisfactory balance of trade will result in slow economic growth and narrow opportunities for reform and restructuring efforts.

Given the relatively slow growth expected for the Hungarian and Industrialized Western economies for the next several years, and assuming continued availability of credit, we expect average annual growth rates in the neighborhood of 6 percent for exports to the Industrialized West and 5 percent for imports for the 1980–85 period. These trends would result in a $467 million deficit in Hungary's trade with the Industrialized West by yearend 1985, an improvement in real terms from the 1980 yearend deficit of $488 million. Limited growth is expected in Hungarian imports of machinery and transport equipment. Major imports will continue to be machine tools, motor vehicle

and agricultural machinery parts for assembly and reshipment, food processing equipment, and machinery required for increasing production of coal, copper, aluminum, and steel. Growth in demand for raw and semifinished materials may slacken as a result of the expected slow growth of the economy and the low priorities given the consumer goods and construction industries.

Major Hungarian exports to the West will be foodstuffs and clothing—for which low growth rates are expected—and buses, small electrical devices, and agricultural machinery and parts—all expected to do well in Western markets.

U.S.-Hungarian trade should continue to be a small percentage of each country's total trade. Total trade turnover is projected to reach $282 million in 1985, with a U.S. deficit of $50 million.[1] Manufactured goods will remain the mainstay of U.S. imports, while Hungarian imports of U.S. manufactures may be inhibited by budgetary constraints. Hungary's biggest need will continue to be animal feedstuffs—particularly soy meal—to support an expanding meat industry. Strong competition has developed, however, from Brazil and other suppliers. Further diversification of agricultural trade will be limited due to the relative self-sufficiency of both countries in this area.

I. Hungarian Objectives and Performance in Trade During the 1970's

Hungary is a small nation, with a population of 10.7 million and an estimated 1980 GNP of $52.8 billion. Agriculture is the backbone of the economy. Given the strong government-run agricultural sector and flourishing second economy of private plots, Hungary is able to feed itself and export large quantities of food, but still relies on imports of animal feeds such as soy meal and corn. Hungary is relatively poor in raw materials and heavily dependent on minerals imports. Only bauxite, low quality coal, and copper are found in appreciable amounts. In manufacturing, Hungary is a major producer of pharmaceuticals, agricultural chemicals, textiles, aluminum products, and transportation equipment. Total imports and exports amounted to $23 billion in 1979, with an estimated 34 percent conducted outside of CMEA,[2] most of this with developed countries (see table A–1).

1. TRADE WITH THE WEST

In the late 1960's, Hungary embarked on a program to modernize its economy through increased imports of Western machinery and technology and decentralized economic decision-making. The New Economic Mechanism (NEM), introduced in 1968, established the goal of a market-oriented economy for Hungary significantly different from those of other countries in Eastern Europe. Government control over the economy was to be exerted through macroeconomic credit, price, wage, and foreign trade regulators, rather than through direct intervention at the enterprise level. Numerous price controls, differentiated taxes and subsidies, and administrative restrictions were left in place, however, as short-term measures to help deal with the problems of transition.

---

[1] Based on U.S. Census Bureau data, which may undervalue U.S. exports to Hungary. See Section I.2.

[2] CMEA: Council for Mutual Economic Assistance (COMECON).

The overhaul of the allocation system and infusion of Western machinery and technology nevertheless resulted in economic gains during the 1968–73 period. In 1974, however, Hungary began running a worrisome hard currency trade deficit (see Table A–2). Imports exceeded exports by $702 million in 1974, as compared with only $88 million in 1970. This shortfall expanded annually, reaching nearly $1.4 billion in 1978, before measures to reduce the deficit began to show some effect.

The deterioration in Hungary's balance of hard currency trade was brought about primarily by unfavorable changes in the external environment, but the continued inflexibility of the Hungarian economic system was a major reason for Hungary's inability to adjust quickly to these changes. Both the enlargement of the European Community (EC) in 1973, which increased the number of trading partners levying common tariffs against Hungary, and the onset of recession in the West the following year hurt the balance of trade. In addition, Hungary's terms of trade deteriorated as the world prices of the raw and semi-finished materials shot up more rapidly than the prices of the finished goods Hungary exports. The main shock came in the aftermath of the 1973–74 oil price increases, but the trend continued throughout the decade, forcing the Hungarian Government to re-evaluate its development policies.

The initial response of the government to the growing trade deficit, reflected in the Fifth Five Year Plan introduced in 1976, was to move away from treating hard currency exports as a residual and work instead for a dynamic expansion of sales to the West. Rather than jeopardize progress in the modernization program by cutting back imports, Hungarian planners adopted what they believed would be a short-term strategy of increased foreign borrowing. This was expected to enable Hungary to maintain a high level of hard currency imports while the export drive gathered steam. By 1978, however, with exports lagging further behind imports, it became apparent that reductions in investment (and consequently in the rate of economic growth) would have to be accomplished to keep hard currency debt at a manageable level. In 1979, the first year of the readjustment program, Hungary's trade deficit with the West was slashed by 44 percent. Imports were held to less than 6 percent growth, while exports expanded by 33 percent. These trends continued through 1980 to greatly improve the Hungarian hard currency balance of trade.

2. TRADE WITH THE UNITED STATES

In 1979, following enactment of the U.S.-Hungarian trade agreement establishing non-discriminatory tariffs between the two countries, Hungarian exports to the United States increased 64 percent to $112.5 million (see Table A–3). Hungarian imports from the U.S. declined, however, as Hungary reduced purchases of agricultural products. As a result, U.S. trade with Hungary moved from surplus to deficit during 1979.

Trade levels showed little change in 1980. Hungarian imports from the U.S. amounted to $79.0 million, while exports declined slightly to $107.5 million. U.S. Census Bureau data thus showed the United States running a $28 million deficit in trade with Hungary for 1980.

Hungarian trade statistics, to the contrary, showed a U.S. surplus of $40 million. According to these data, Hungarian exports to the United States totalled $123 million in 1980, while imports from the U.S. reached $163 million. To account for the discrepancy, the Hungarian Ministry of Foreign Trade provided documentation indicating that large amounts of fungible goods from the United States (chiefly soy meal, cotton, and chemicals) were moved through European-based subsidiaries or agents of U.S. companies and thereby eluded inclusion in U.S. Census Bureau statistics.

In 1981, Hungarian imports from the United States declined slightly to $77.5, according to U.S. Census Bureau statistics. Hungarian statistics, in contrast, showed a large increase to $231 million. Hungarian exports to the United States increased to $128.6 million (U.S. Census Bureau data), or $146 million (Hungarian data).

II. HUNGARIAN HARD CURRENCY DEBT

Hungary's net hard currency debt rose rapidly during the past decade, from $850 million in 1971 to $7.1 billion at yearend 1979 (see Table A-4). This increase, averaging around 36 percent per year during the 1975–78 period, dropped to only 12 percent for 1979 as Hungary strived to balance its hard currency trade. In 1980, net debt declined to $6.8 billion.

Hungary's debt service ratio was 31.7 percent at yearend 1981. Prior to 1978, Hungary's debt service ratio was below 30 percent, but increased Euromarket interest rates boosted Hungary's debt service costs sharply in the late 1970's.

Almost all of Hungary's hard currency debt is owed to Western commercial banks, with U.S. banks holding about 11 percent of the total at yearend 1980. As of June 1981, Hungary's indebtedness to the U.S. Government totalled $10.2 million, consisting of $4.9 million owed to the Export-Import Bank and $5.3 million to the Commodity Credit Corporation.

In late 1981, the Polish and Romanian financial situations sharply lowered Western bank confidence in all East European borrowers. As of May, 1982, no new long-term syndicated loans had been concluded, forcing Hungary to rely instead on expensive short term credits. Given the changed financial environment, Hungary's high debt service ratio, and its relatively heavy dependence on a continuing rollover of Western credits, Hungary's debt must be considered to be at a troublesome level.

In May 1982, Hungary was accepted for membership in the International Monetary Fund. Hungarian membership in the IMF may serve to reassure Western bankers of the government's commitment to further reforms to insure the long-term strength of the economy, and may make it easier for Hungary to borrow on the commercial market to cover transitional deficits. Membership also gives Hungary access to IMF balance of payment loans.

III. HUNGARIAN HARD CURRENCY TRADE OBJECTIVES AND STRATEGY: 1981–85

Tables A–5 through A–8 detail the composition of Hungarian imports from 17 major Industrialized Western (I.W.) countries for the years 1974–79. The percentage trade shares of each of the 17 countries are listed in Table A–9. Imports from these countries accounted for 69.4 percent of total Hungarian hard currency imports in 1979.

Total imports from the Industrialized West grew at an average annual rate of 13.6 percent for the years 1974–78 (compared with an 8.4 percent annual rate for Hungary's exports to the group), but remained nearly unchanged in 1979 following cutbacks in investment. Most of Hungary's imports from the Industrialized West were composed of semifinished and finished manufactures. Foodstuffs and raw materials (including mineral fuels) accounted for only 11 percent of the 1979 imports. Hungary's demand for these commodities was met largely through domestic production or trade with its CMEA partners. The same was true for most consumer goods needs.

1. OBJECTIVES AND CONSTRAINING FACTORS

Hungary's highest economic priority for the first half of the 1980's is to maintain its improved balance of trade. To accomplish this, the government is restraining imports and investment while expanding upon the market-oriented reforms of the NEM to increase the efficiency of the economy. The economic program is aimed at encouraging enterprises to conserve imported raw materials, invest with an eye to rapid returns, and compete more aggressively in Western markets. The expected measures include:

Further reduction of price-distorting subsidies and ad-hoc taxes;

A larger role for loans to enterprises rather than direct government grants;

Closer linkage of non-agricultural consumer and producer prices to world prices;

Limited convertibility of the *forint*;

Stronger emphasis on profitability as a criterion for production and investment decisions;

Continued promotion of small and medium-size firms and an increasing role for private enterprises organized as cooperatives; and

Bureaucratic consolidation and decentralization of commercial decisionmaking.

The Hungarian Government will probably proceed with caution in implementing these measures. The restraint in hard currency expenditures needed over the 1981–85 period to achieve the government's primary goal of a long term satisfactory balance of trade will result in slow economic growth which could narrow opportunities for reform and restructuring efforts. Reductions in hard currency expenditures over the several years needed to achieve Budapest's economic goals will be difficult, and undoubtedly entail hard choices.

2. IMPORT NEEDS FROM THE INDUSTRIALIZED WEST, 1981–85

Machinery and Transport Equipment (SITC 7) comprised 32.4 percent of Hungarian imports from the Industrialized West in 1979 (see

Table A–6). As well as being the largest import category, Machinery and Transport Equipment exhibited the fastest growth rate, an average of 17.9 percent per year over the 1974–79 period. Major imports included machine tools and other non-electric machinery, electrical switchgear, and motor vehicle parts. A rank order list of the top import items is given in Table A–7.

The 1981–85 Five Year Plan emphasizes purchases of materials and machinery for existing plants with prospects for rapid growth in hard currency earnings. Imports of Western machine tools appear to be indispensable to current plans for expanding production of machinery, transport equipment, and semifinished metal products—all high priority areas. Machine tools imports showed strong growth in 1979, despite cutbacks in overall imports of machinery. Hungary can also be expected to give priority to imports of motor vehicle and agricultural machinery parts for assembly and reshipment. Demand for complete harvesting machines, liftloading machines, tractors and the like may slacken if plans to make more efficient use of existing units are implemented.

Plans to greatly expand the production of prepared foods will require a priority on imports of food processing equipment. Similarly, intensified production of coal, copper, bauxite, steel, and aluminum to meet the high targets set by the Sixth Five Year Plan will necessitate purchases of mining, refinery, and foundry equipment.

Basic Industrial Goods (SITC 6) accounted for 27.0 percent of Hungary's imports from the Industrialized West in 1979. These consisted primarily of textile yarns and fabrics, iron and steel, paper products, and non-ferrous metals.

The growth in Hungary's demand for manufacturing materials may slacken as a consequence of the slower rate of economic growth expected for the 1981–85 period. Hungary has already held increases in imports of iron and steel to the low annual rate of 4.1 percent in the years 1974–79. Further opportunities for economizing on industrial materials imports may exist in textile yarns and fabrics, given the low priority accorded to expanding the clothing industry and the lack of growth expected in domestic consumer purchasing power. Clothing exports have been an important source of hard currency earnings, however, accounting for 14.0 percent of total exports to the Industrialized West in 1979.

Under the new plan, enterprises are required to demonstrate savings in the use of Western raw and semi-finished materials, through the elimination of waste and increased reliance on CMEA markets. It is questionable, however, whether either of these options will reduce hard currency import growth by a substantial degree. Hungary has had difficulty obtaining adequate increases in several essential categories of material inputs from CMEA in recent years. Resorting to Western markets for these materials contributed to Hungary's deteriorating terms of trade. Growth in imports of Basic Industrial Goods probably will be determined more by the severity of the economic slowdown than by individual enterprise efforts at conservation and substitution, and choices among competing needs may be difficult.

Chemicals are the third largest category, with a 22.4 percent share of total imports from the Industrialized West in 1979. The chemical industry is slated to be the fastest growing manufacturing sector with new capacity intended for import substitution as well as export growth. Planned increases in the production of polymers and other plastics, agricultural chemicals, and pharmaceuticals may make it easier for imports of these commodities to be held down. Imports of synthetic dyes should exhibit relatively slow growth due to the low priority given expansion of the clothing industry. Dyes will continue to be a major import item, however, given the importance of clothing as a source of hard currency earnings.

Miscellaneous Manufactured Goods accounted for only 5.9 percent of Hungarian purchases from the Industrialized West in 1979. These imports can be divided into two categories: instrumentation, which includes cameras and optical equipment, medical instruments, and precision measuring and controlling devices for industry; and consumer goods, such as clothing and furniture. Instrumentation comprised about 40 percent of total Miscellaneous Manufactured Goods imports, and should continue to be an important item in this trade category. The Hungarian market for consumer goods is less promising in view of the stable or declining worker incomes, and a reduction in hard currency expenditures on imported consumer goods may be viewed by the government as a comparatively painless way to economize. On the other hand, the Hungarian Government has consistently and effectively used ample supplies of consumer goods both to motivate labor and maintain political stability.

Crude Materials accounted for 5.4 percent of Hungary's imports from the Industrialized West in 1979, and consisted primarily of textile fibers, animal hides, wood products, and building materials. Because these commodities are used chiefly in the low priority consumer goods and construction industries, demand through 1985 will probably be slack, with imports showing little increase over earlier levels.

Foodstuffs in adequate supply for Hungarian consumers are seen as critical to maintaining public confidence in the government. Hungary is fortunate to have a strong agricultural industry and a flourishing second economy of private plots to supplement the output of government-run farms. Hungary has been able to feed itself and to export large quantities of food to both hard and soft currency markets, with minimal food imports from the West. Foodstuffs comprised merely 4.5 percent of total imports from the Industrialized West in 1979, and consisted mainly of livestock feed and cereal grains and grain products. Small amounts of meat, fruit, and vegetables were also purchased. Hungary was able to hold imports of these commodities to zero growth over the 1974–79 period, although purchase levels varied by as much as 17 percent from year to year.

The Hungarian Government appears intent on insulating agriculture from some of the pressures of reform, and crop price subsidies are being left in place to spur production. Slow growth in domestic demand should enable Hungary to hold down food imports through 1985, but the level of expenditures may depend mainly on price trends.

Mineral Fuels, consisting mainly of coal and petroleum, amounted to only 1.0 percent of total imports from the Industrialized West in 1979. Although Hungary produces some coal, natural gas, and oil, the bulk of Hungary's energy needs is met through deliveries from CMEA. The Soviet Union has provided about 90 percent of Hungary's oil requirements in recent years—much of it at concessionary prices. The level of subsidized sales was recently reduced, however, by a reported 10 percent CMEA-wide.

Growth in domestic mineral fuel production probably will not keep pace with increases in Hungarian demand over the 1981–85 period, despite the slowdown in economic growth, increased priority for energy conservation, and efforts to accelerate exploitation of Hungary's comparatively small coal and natural gas reserves. The slowdown in economic growth will result in reduced growth in energy demand, but the low rate of investment at the same time will hinder efforts to replace energy-inefficient capital stock, speed up coal production, and switch from oil to coal-fired electrical generation. Domestic nuclear power cannot make a contribution to the energy mix until sometime in the latter half of the decade.

IV. HUNGARIAN HARD CURRENCY EXPORT CAPABILITIES: 1981–85

Hungary's ability to obtain needed hard currency imports for 1981–85 will be determined primarily by the success of its export development program. In the 1974–79 period, total hard currency exports to the 17 Industrialized Western countries grew at an average annual rate of 13.0 percent, largely on the strength of a 33.7 percent increase in 1979. Tables A–10 through A–12 show the composition of these exports, which accounted for 71.9 percent of Hungary's total 1979 hard currency earnings.

Foodstuffs was the biggest hard currency-earning export category in 1979, comprising 25.6 percent of exports to the Industrialized West. Major food export items included meat and meat products, live animals, and fruits and vegetables.

The agricultural and food processing industries have been given high export growth targets for the 1981–85 period, based on the rising quality and size of livestock herds, new agricultural price incentives, the expected lack of growth in domestic consumer purchasing power, and increasing U.S. and West European demand for small game animals and pork specialty items such as canned hams, bacon, and sausages. To meet these ambitious export goals, food processing, packaging, and refrigeration machinery imports have been given priority, and new measures to make more efficient use of agricultural machines and chemicals have been enacted to help overcome less than optimal investment in these areas.

The export growth record for foodstuffs is not encouraging. The average annual growth rate for 1974–79 was 7.6 percent, the lowest among all categories. The major factors working against export success in foodstuffs in recent years have been import restrictions in European Community markets and, on the Hungarian side, insufficient investment in flood control, irrigation, and agricultural machinery; labor shortages; and inadequate incentives. Continuation of these trends could frustrate plans for increasing food exports to the Industrialized West over the next several years.

Miscellaneous Manufactured Goods—mostly clothing—was the second largest export category, with 20.3 percent of total exports to the Industrialized West in 1979. A prime constraint on the future growth of clothing and furniture exports is the relatively low level of automation in Hungarian factories. Western demand has exceeded Hungarian supply capabilities in recent years, and the low priority accorded the consumer goods industries under the Sixth Five Year Plan makes it unlikely that this bottleneck will be completely removed, although progress is expected. Hungary has had success entering into industrial cooperation agreements with clothing manufacturers, in which the Western partners provide the raw materials, production machinery, and know-how in exchange for a portion of the output or a role in third country marketing. The Hungarians are expected to make greater efforts to secure similar agreements with other manufacturers during the next several years.

Basic Industrial Goods exports amounted to 18.4 percent of the total in 1979. Export growth over the 1974–79 period was very poor for all major commodities until sharp increases in 1979 brought the average rate for the period to 10.0 percent per year.

Exports of iron and steel to the important West European markets declined in 1977 and 1978 when lagging demand prompted the European Community to impose import quotas and price controls. The price controls were lifted in 1980, but import quotas are expected to remain in force for as long as the economic slowdown holds West European steel output below capacity. As Industrialized Western demand recovers, Hungarian steel exports will probably post a slow recovery due to the lower quality of some Hungarian steels as compared to Industralized Western products. Furthermore, Hungary will have to complete an extensive program of expansion and modernization of its steel industry if it is to have the capacity to take full advantage of sales opportunities.

Exports of aluminum also are expected to slacken due to the current world oversupply. Should the market eventually improve, Hungary may be able to increase hard currency earnings through more intensive processing. Whereas major aluminum exports have in the past consisted mainly of alumina, scrap metal, and simple alloy, new products developed for export include sidings and roofing, boats, pre-fabricated buildings, window frames, and telephone booths.

Machinery and Transport Equipment comprised 11.3 percent of total exports to the Industrialized West in 1979. Increased sales of electrical machinery, such as household appliances, electric light bulbs, motors, and numerically controlled (NC) machine tools, were largely responsible for the 26.5 percent annual growth rate exhibited by this sector over the 1974–79 period.

Machinery and Transport Equipment exports should continue to be strong during 1981–85. Buses, electric motors, and semiconductor devices are scheduled for vigorous export promotion efforts. Increased export opportunities are also expected from recent industrial cooperation agreements with Western firms in the production of diesel engines, agricultural machinery, office machines, and NC machine tools

Lack of competitiveness in world markets remains the most serious obstacle to expanding Hungarian sales of some machinery products to the Industrialized West—less so for sales to LDCs, which accounted for over half of Hungary's hard currency earnings from machinery in 1979. The government believes its economic program will eventually force manufacturers to increase product quality to remain profitable.

Chemicals accounted for 8.9 percent of Hungarian exports to the Industrialized West in 1979, and posted an average annual growth rate of 19.8 percent over the 1974–79 period. For the 1981–85 Plan period, Hungary is actively pursuing industrial cooperation agreements for the production of chemical lines in demand in Industrialized West markets, and has recently concluded agreements with FRG, Italian, and Swiss buyers. Production of synthetic plastic (chiefly PVC), synthetic fibers, hydrocarbons, agricultural chemicals, and pharmaceuticals is expected to be increased.

Crude Materials comprised only 8.8 percent of all exports to the Industrialized West. Most of the export earnings growth from this commodity category has been due to increased sales of agricultural materials such as bird feathers and oil seeds, and to metal ores and scrap, chiefly bauxite. Hungary lacks the resources to significantly expand exports of wood and lumber.

Mineral Fuel exports—mainly distillate fuels and gasoline—registered the largest average annual growth rate, 37.7 percent. Sales amounted to only 5.6 percent of total earnings from exports to the Industrialized West in 1979, however, and the gains were due largely to increases in the world market price for oil. Hungary's growing energy requirements make it unlikely that export quantities will be significantly increased over the next several years.

V. PROJECTED 1985 HUNGARIAN TRADE WITH THE INDUSTRIALIZED WEST

One possible scenario for trade between Hungary and the Industrialized West through 1985 is presented in Table A–13. This scenario—based on Hungary's trade performance and current economic policies, import needs, and export capabilities—assumes moderate success for Hungary's efforts to expand hard currency exports while holding down imports, investment, and overall economic growth. It also assumes that Hungary will be incapable of sustaining the exceptional trade growth exhibited in 1979–80—particularly given the slow economic growth expected for both Hungary and its Western trading partners in the early 1980's. A significant factor affecting performance is continued access to Western credits. Western bank lending practices will determine to a large extent the pattern of Hungarian foreign trade in the coming years.

The projected average annual growth rate for Hungarian exports to the Industrialized West for 1980–85 is 6 percent, as compared with 8.4 percent actually achieved from 1974–78 before the inception of the readjustment program. Import growth is projected at 5 percent per year versus 13.6 percent for 1974–78. These trends yield a trade deficit for Hungary of $467 billion in 1985, an improvement in real terms from the 1980 yearend deficit of $473 million.

The most notable development under these conditions is the increasing importance of Machinery and Transport Equipment in both import and export trade with the Industrialized West. This would occur in part as a consequence of:

An increasing number of industrial cooperation agreements in which Hungary imports Industrialized West parts and equipment for further assembly and exports finished products;

Production priority for Hungarian goods that minimize imports of raw materials from hard currency markets;

Industrialized West protectionist measures in agriculture, steel, and other non-machinery areas; and

Lack of competitive substitutes for, or alternative suppliers of, quality Industrialized West machinery needed to improve export capabilities.

VI. U.S.-Hungary Trade Potential Under Normalized Conditions

1. POTENTIAL COMPOSITION AND VOLUME OF U.S. EXPORTS TO HUNGARY UNDER NORMALIZED TRADING CONDITIONS

Hungarian imports of agricultural products from the United States declined from $24.4 million in 1980 to $12.9 million in 1981, as Hungary switched from U.S. to Brazilian suppliers for its major purchases of soy meal.[3] The Brazilian suppliers were able to offer a comparable product at a lower price, due primarily to lower transportation costs and more favorable financing. Over the next several years, Hungary will continue to import substantial amounts of soy meal and corn to support an expanding livestock industry.

Other important imports over the next several years will be cotton, animal hides, and furskins for the hard currency-earning clothing and textile industries. Prospects for rapid growth in sales are limited, however, by the strong position of the Hungarian agricultural sector.

Hungary's imports of U.S. manufactured goods totalled $63.6 million in 1981, according to U.S. Census Bureau data. Motor vehicle and agricultural tractor parts were the largest category. Other important manufactured goods imports from the U.S. in recent years were concentrated superphosphates, tractors, soil cultivation machinery, precision instrumentation, insecticides, pharmaceuticals, glass, cotton denim, and construction and mining machinery parts.

High on Hungary's shopping list for the U.S. market in the coming years are agricultural machinery parts and chemicals, and food processing, meat-packing, and refrigeration equipment. Sales opportunities are also expected to expand for U.S. manufacturers of precision instrumentation in the fields of spectroscopy, materials testing, and electro-optics. The Hungarians are also looking to purchase licenses and technology in telecommunications, microelectronics, and pharmaceuticals.

U.S. businesses will have to overcome stiff competition from technologically-advanced West European and Japanese suppliers. West European firms in particular enjoy the benefits of proximity to the Hungarian market. This has paid off in sales of bulk commodities with high shipping costs, such as wood, metal ores, mineral fuels, iron and steel, chemicals, and building materials. The United States is not likely to substantially increase exports of most of these commodities, and U.S. firms that do obtain contracts will tend to be those which can fill the order from European subsidiaries.

It is also doubtful that the United States can make a sizable dent in the Hungarian consumer goods market, which is dominated by traditional intra-European trading patterns. U.S. consumer goods are generally too expensive to be competitive in the Hungarian marketplace. Hungary has expressed interest in purchasing small quantities, however, to provide the Hungarian consumer with some sought-after items such as cosmetics, sporting goods, maternity and baby care products, and housewares.

---

[3] U.S. Census Bureau statistics for 1980 and 1981 undervalue U.S. exports of fungible goods to Hungary due to transshipments through third countries. In 1980, for example, the Hungarians documented imports of agricultural products from the United States totalling $50 million, double the U.S. Census Bureau figure.

2. POTENTIAL COMPOSITION AND VOLUME OF HUNGARIAN EXPORTS TO THE UNITED STATES UNDER NORMALIZED CONDITIONS

U.S. imports of Hungarian goods expanded dramatically to $112.2 million in 1979 following the granting of Most-Favored Nation status to Hungary. This was largely on the strength of a 125 percent increase in purchases of manufactured goods, although imports of agricultural products also increased by 37 percent. As a result of these disparate growth rates, manufactured goods accounted for 67.4 percent of total imports in 1979, as compared with only 49.0 percent in 1978. In 1981, U.S. imports from Hungary reached $128.6 million, with the share of manufactured goods further increasing to nearly 73 percent.

According to Census Bureau data, more than two-thirds of U.S. agricultural imports from Hungary in 1981 consisted of canned hams. These exports earned Hungary far more hard currency than sales of any other product to the United States. Demand is expected to continue strong in the next several years for these and other pork specialty items such as sausage and bacon. The U.S. also imported small amounts of wine, paprika, and feathers.

Leading manufactured goods imports from Hungary in 1981 consisted of tractor and motor vehicle parts, footwear, electric light bulbs, clothing, organic chemicals, typewriters, and glassware. These products will continue to be important components of trade. Hungary is particularly interested in expanding sales of rear axles, light bulbs, and machine tools. Ikarus articulated buses, partially assembled in the United States by the Crown Coach Corporation, also promise to be a major item in future U.S.-Hungarian trade. Initial purchases of 112 buses were made recently by three U.S. cities. In addition to the Crown/Ikarus bus agreement, Hungary is actively pursuing licensing and industrial co-operation arrangements in a broad range of activities as a way of increasing production efficiency, gaining preferential access to materials, and eliminating long-standing problems with quality and service that have stood in the way of expanded sales to U.S. markets.

For the next several years, the most rapid growth by value will be in U.S. purchases of Hungarian machinery components and semifinished materials for further processing and assembly in the United States. Hungarian purchases of U.S. manufactures will be inhibited by budgetary constraints, Western European competition, and intra-CMEA trade obligations. By comparison, growth in the trade of agricultural products will be limited to specialty food items, since the United States and Hungary are both by and large agriculturally self-sufficient.

VII. PROJECTED 1985 U.S.-HUNGARIAN TRADE

Table A-14 shows one possible scenario for U.S.-Hungarian trade. The projections are based on the foregoing analysis, using 1981 U.S. Census Bureau data for the base and assuming the continued availability of credits. Total trade is projected to reach $256 million, with U.S. exports growing at an average annual rate of 5.0 percent and imports at 6.0 percent for the 1982-85 period. The 1985 U.S. trade deficit with Hungary is projected to be $68 million, compared to a 1981 deficit of $51.1 million.

APPENDIX

TABLE A-1.—HUNGARIAN FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960-79

[Millions of U.S. dollars]

	1960	Percent of total	1970	Percent of total	1974	Percent of total	1978	Percent of total	1979	Percent of total
Imports	976		2,505		5,340		10,584		11,919	
of which:										
U.S.S.R	303	31	832	33	1,470	28	3,672	35	4,325	36
East Europe	317	32	726	29	1,304	24	2,451	23	3,029	25
Developed countries	237	24	678	27	1,965	37	3,210	30	3,326	28
Less developed countries	58	6	177	7	425	8	710	7	716	6
Exports	874		2,317		4,874		8,814		11,117	
of which:										
U.S.S.R	256	29	790	34	1,517	31	3,208	36	3,779	34
East Europe	278	32	648	28	1,465	30	2,666	30	3,248	29
Developed countries	192	22	630	27	1,363	28	1,980	22	2,639	24
Less developed countries	58	7	137	6	325	7	555	6	721	6

Source: CIA, Handbook of Economic Statistics, (ER 79-10274), August 1979.

TABLE A-2.—HUNGARIAN HARD CURRENCY TRADE[1] 1970-79

[Millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	Average annual growth rate, 1974-79 (percent)
Imports	855	2,390	2,464	2,551	3,081	3,920	3,880	10.2
Exports	767	1,688	1,691	1,945	2,185	2,535	3,361	14.8
Trade turnover	1,622	4,078	4,155	4,496	5,266	6,455	7,241	
Balance	−88	−702	−773	−606	−896	−1,385	−519	

[1] Includes developed and less developed countries.

Source: CIA Handbook of Economic Statistics, (ER 79-10274), August 1979.

TABLE A-3.—UNITED STATES-HUNGARIAN TRADE, 1974-81

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1981
U.S. exports	56.2	76.1	63.0	79.7	97.7	77.6	79.0	77.5
Of which:								
Agricultural	37.1	40.4	22.4	33.9	52.7	24.5	24.4	12.9
Manufactured	17.9	35.3	40.0	44.8	44.2	52.4	54.0	63.6
Other	1.2	.4	.7	1.1	.8	.7	.6	1.0
U.S. imports	754	34.6	49.0	46.6	68.5	112.2	107.5	128.6
Of which:								
Agricultural	..1	13.6	22.5	26.2	34.6	35.6	3133	34.0
Manufactured	64.7	20.9	26.2	20.3	33.6	75.6	75.8	93.8
Other	.6	.1	.3	.1	.3	.7	.4	0.8
Trade turnover	131.5	110.6	112.0	126.3	166.2	189.8	186.5	206.1
Balance	−19.3	+41.4	+14.0	+33.1	+29.2	−34.6	−28.4	−51.1

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-4.—HUNGARY: HARD CURRENCY DEBT

[Millions of dollars]

	1971	1978	1979	1980
Commercial debt	970	7,400	8,200	8,100
Owed to U.S. banks	(1)	837	1,006	886
Government-backed debt	100	60	70	60
Errors and omissions	0	40	30	40
Gross debt	1,070	7,500	8,300	8,200
Commercial assets	220	1,000	1,200	1,400
Net debt	850	6,500	7,100	6,800

[1] Not available.

Source: U.S. Government.

TABLE A-5.—HUNGARIAN TRADE WITH THE INDUSTRIALIZED WEST (IW) AND UNITED STATES, 1974-79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Imports from IW	1,727.8	1,784.0	1,763.9	2,240.9	2,880.9	2,872.8
United States	56.2	76.1	63.0	79.7	97.7	77.6
U.S. share (percent)	(3.3)	(4.3)	(3.6)	(3.6)	(3.4)	(2.7)
European Community	1,187.6	1,182.4	1,178.2	1,523.7	1,969.4	2,024.2
European Community share (percent)	(68.7)	(66.3)	(66.8)	(68.0)	(68.4)	(70.5)
Of which:						
Foodstuffs [1]	159.3	131.9	106.9	132.6	146.3	129.7
United States	29.1	37.0	15.5	25.1	46.3	14.8
U.S. share	18.3	28.1	14.5	18.9	31.6	11.4
European Community	93.3	62.7	52.2	93.9	81.0	95.3
European Community share	58.6	47.5	48.8	70.8	55.4	73.5
Manufactured [2]	1,446.6	1,542.4	1,532.6	1,950.0	2,550.9	2,519.2
United States	17.9	47.0	40.0	44.9	44.3	52.7
U.S. share	1.2	3.0	2.6	2.3	1.7	2.1
European Community	1,028.6	1,061.8	1,050.5	1,330.6	1,767.5	1,782.9
European Community share	71.1	68.8	68.5	68.2	69.3	70.8
High technology	143.1	180.6	197.8	282.7	333.0	351.0
United States	3.1	4.5	4.5	13.3	7.2	9.7
U.S. share	2.2	2.5	2.3	4.7	2.2	2.8
European Community	104.8	125.4	130.6	189.8	245.9	262.3
European Community share	73.2	69.4	66.0	67.1	73.8	74.7
Exports to IW	1,292.8	1,203.0	1,379.0	1,593.5	1,784.2	2,385.1
United States	75.4	34.7	49.0	46.6	74.7	121.9
U.S. share	5.8	2.9	3.6	2.9	4.2	5.8
European Community	835.7	853.7	949.6	1,145.4	1,284.5	1,723.6
European Community share	64.6	71.0	68.9	71.9	72.0	72.3
Trade turnover with IW	3,020.6	2,987.0	3,142.9	3,834.4	4,665.1	5,257.9
Balance	−435.0	−581.0	−384.9	−647.4	−1,096.7	−487.7
Balance with United States	+19.2	−41.4	−14.0	−33.1	−23.0	+44.3
Balance with European Community	−351.9	−328.7	−228.6	−378.3	−684.9	−300.6

[1] SITC 0, 1, 4.
[2] SITC 5–8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF HUNGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST, 1974-79

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	Percent of 1979 total	Average annual growth (percent)
Imports from industrialized West	$1,727.8	$1,784.0	$1,763.9	$2,240.9	$2,880.9	$2,872.8	100.0	10.7
Foodstuffs (SITC 0, 1, 4)	159.3	131.9	106.9	132.6	146.3	129.7	4.5	-.4
Livestock feed	62.1	57.3	36.9	49.8	75.8	49.8		
Grains and grain products	15.8	9.0	4.4	14.6	23.9	26.4		
Other	81.4	65.6	65.6	68.2	46.6	53.5		
Crude materials (SITC 2)	98.8	89.8	96.8	124.4	142.2	155.7	5.4	9.5
Textile fibers	37.2	29.4	32.8	34.5	34.6	33.9		
Animal hides	12.7	6.4	12.7	30.1	33.3	32.7		
Wood, lumber, and cork	4.5	3.6	1.4	9.7	17.7	23.2		
Other	44.4	50.4	49.9	50.1	56.6	65.9		
Mineral fuels (SITC 3)	13.2	6.3	9.8	8.1	17.0	29.8	1.0	17.7
Coal and coke	(1)	(1)	(1)	(1)	5.6	17.7		
Petroleum and petroleum products	13.1	6.2	9.7	8.0	11.3	12.1		
Chemicals (SITC 5)	466.2	436.6	419.0	501.5	636.6	643.9	22.4	6.7
Elements and compounds	170.1	145.5	145.2	184.5	232.9	251.2		
Plastics	120.6	83.3	98.9	125.3	155.0	143.3		
Dyes	38.4	36.5	42.7	53.3	65.5	72.3		
Pharmaceuticals	14.0	16.2	18.1	21.6	38.8	33.2		
Other	123.1	155.1	114.1	116.8	144.4	143.3		
Basic industrial goods (SITC 6)	495.9	552.4	489.1	607.4	772.9	775.5	27.0	9.4
Textile yarns and fabrics	159.9	186.8	181.4	218.5	260.0	257.8		
Iron and steel	108.5	130.3	83.1	101.4	133.0	132.6		
Paper products	75.6	63.4	59.9	74.3	88.9	91.0		
Nonferrous metals	45.9	33.8	31.3	39.6	56.0	69.4		
Other	106.0	138.1	133.4	173.6	235.0	224.7		
Machinery and transport equipment (SITC 7)	408.0	470.1	530.8	721.9	991.4	930.0	32.4	17.9
Nonelectrical machinery	288.9	323.6	368.3	504.6	686.0	638.2		
Electrical machinery	86.7	111.8	112.0	153.8	204.7	200.3		
Transport equipment (SITC 8)	32.5	34.7	50.5	63.6	100.7	91.8		
Miscellaneous manufactures (SITC 8)	76.5	83.3	93.7	119.2	150.0	169.5	5.9	17.2
Instrumentation	25.7	28.9	34.9	47.0	61.5	66.0		
Clothing	17.6	17.9	19.6	20.6	26.9	31.5		
Other	33.2	36.5	39.2	51.6	61.6	72.0		
Other (SITC 9)	9.9	13.7	17.8	25.8	24.5	38.4	1.3	31.1

[1] Negligible.

Source: U.S. trade data, magnetic tapes.

TABLE A-7.—LEADING HUNGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Nonelectric machinery	1	$633,172	22.2		$685,977	23.8		$504,573	22.5	
65	Textile yarn and fabric	2	257,785	9.0		260,035	9.0		218,497	9.8	
51	Chemical elements and compounds	3	251,209	8.7		232,878	8.1		184,489	8.2	
72	Electrical machinery	4	200,302	7.0		204,737	7.1		153,760	6.9	
58	Plastic materials	5	143,332	5.0	5.9	155,030	5.4	53.4	125,316	5.6	53.0
67	Iron and steel	6	132,587	4.6		133,008	4.6		101,353	4.5	
69	Metal manufactures, miscellaneous	7	103,228	3.6		103,128	3.8		772,335	3.2	
59	Miscellaneous	8	92,275	3.2		98,535	3.4		70,222	3.1	
73	Transport equipment	9	91,848	3.2		100,727	3.5		63,590	2.8	
64	Paper and paperboard	10	90,978	3.2	69.7	88,918	3.1	71.8	74,297	3.3	70.0
	5-DIGIT SITC AGGREGATES										
5812	Polymers	1	62,730	2.2		70,427	2.4		72,697	3.2	
7151	Machine tools	2	62,075	2.2		47,572	1.7		49,950	2.2	
7198	Miscellaneous nonelectric machinery	3	53,115	1.8		65,879	2.3		52,503	2.3	
5811	Products of condensation	4	44,945	1.6		39,107	1.4		40,903	1.8	
7222	Electrical switchgear	5	40,601	1.4	9.2	41,387	1.4	9.2	29,036	1.3	10.9
73289	Motor vehicle parts	6	40,467	1.4		46,135	1.6		33,032	1.5	
59999	Miscellaneous chemicals	7	39,279	1.4		40,364	1.4		31,128	1.4	
71992	Cocks and valves	8	39,140	1.4		38,343	1.3		39,253	1.8	
6537	Knits	9	33,854	1.2		29,673	1.0		22,632	1.0	
65161	Synthetic fiber yarn	10	33,116	1.2	15.6	36,416	1.3	15.8	39,291	1.8	18.3
7122	Harvesting machines	11	30,958	1.1		36,808	1.3		22,767	1.0	
53101	Synthetic dye	12	28,630	1.0		27,496	1.0		23,553	1.1	
6782	Iron and steel tubes	13	27,997	1.0		28,820	1.0		18,470	.8	
71931	Liftloading machines	14	27,704	1.0		28,481	1.0		17,741	.8	
51285	Heterocyclic compounds	15	27,135	.9	20.6	24,885	.9	20.9	24,886	1.1	23.1
5810	Plastic materials, miscellaneous	16	26,882	.9		35,340	1.2		1,009	0	
5992	Pesticides, disinfectants	17	25,561	.9		34,877	1.2		22,806	1.0	
71919	Heating and cooling equipment	18	24,518	.9		34,482	1.2		19,831	.9	
65352	Synthetic weaves	19	24,341	.8		26,974	.9		21,925	1.0	
0813	Oil-seed cake and meal	20	23,206	.8	24.9	41,076	1.4	26.9	16,980	.8	26.8
71921	Pumps	21	22,675	.8		24,556	.9		17,313	.8	
72952	Electric measuring and controlling equipment	22	22,156	.8		22,628	.8		18,244	.8	
71839	Food processing machines	23	21,901	.8		9,502	.3		7,375	.3	
65321	Woven wool	24	21,192	.7		18,508	.6		15,109	.7	
65229	Cotton fabric	25	19,808	.7	28.7	16,549	.6	30.1	17,129	.8	30.2

Source: U.N. trade data, magnetic tapes.

TABLE A-8.—ORIGINS OF LEADING HUNGARIAN IMPORTS FROM THE INDUSTRIALIZED WEST

[Millions of U.S. dollars]

1979 item rank	SITC	Description: Origin	1979 Origin rank	1979 Value	1979 Item/origin percent of total	1977 Origin rank	1977 Value	1977 Item/origin percent of total
1	71	Machinery nonelectric		$638.2	22.2		$504.6	22.5
		Federal Republic of Germany	1	310.6	48.7	1	227.7	45.1
		Austria	2	66.6	10.4	2	52.3	10.4
		Italy	3	53.9	8.4	3	42.9	8.5
		United States	7	15.3	2.4	7	16.2	3.2
		European Community		467.5	73.3		355.1	70.4
2	65	Textile yarn and fabrics		257.8	9.0		218.5	9.8
		Federal Republic of Germany	1	141.3	54.8	1	109.9	50.3
		The Netherlands	2	27.3	10.6	2	23.4	10.7
		France	3	22.4	8.7	3	22.0	10.1
		United States	9	1.9	.7	17	[1]	0
		European Community		226.5	87.9		180.2	82.5
3	51	Chemical elements and compounds		251.2	8.7		184.5	8.2
		Federal Republic of Germany	1	80.1	31.9	1	61.0	33.1
		France	2	35.9	14.3	2	18.6	10.1
		Switzerland	3	25.8	10.3	3	17.7	9.6
		United States	11	3.6	1.4	11	1.2	.7
		European Community		181.8	72.4		131.7	71.4
4	72	Electrical machinery		200.3	7.0		158.8	6.9
		Federal Republic of Germany	1	88.1	44.0	1	86.1	44.3
		Switzerland	2	17.2	8.6	2	15.1	9.8
		Austria	3	17.2	8.6	3	14.6	9.5
		United States	9	5.3	2.6	8	5.0	3.2
		European Community		140.6	70.2		104.1	67.7
5	58	Plastic materials		143.0	5.0		125.3	5.6
		Federal Republic of Germany	1	68.9	48.1	1	44.7	35.7
		Austria	2	26.9	18.8	2	35.1	28.0
		The Netherlands	3	9.7	6.7	3	14.8	11.8
		United States	15	[1]	0	15	[1]	0
		European Community		103.1	72.1		81.9	65.4

[1] Negligible.

Source: U.N. trade data, magnetic tapes.

TABLE A-9.—INDUSTRIALIZED WEST (IW) EXPORT TRADE SHARES TO HUNGARY, 1974–79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total ,1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$1, 727, 777	100. 0	$1, 783, 960	100. 0	$1, 763, 865	100. 0	$2, 240, 850	100. 0	$2, 880, 884	100. 0	$2, 872, 759	100. 0	$13, 270, 095	100. 0
Belgium-Luxembourg	39, 183	2. 3	45, 036	2. 5	49, 733	2. 8	67, 845	3. 0	26, 828	3. 4	76, 224	2. 7	374, 853	2. 8
Denmark	34, 826	2. 0	26, 557	1. 5	25, 526	1. 4	38, 326	1. 7	42, 434	1. 5	3, 643	1. 4	207, 368	1. 6
Federal Republic of Germany	601, 635	34. 8	573, 522	32. 1	617, 337	35. 0	833, 444	37. 2	1, 046, 173	38. 0	1, 168, 018	40. 7	4, 890, 129	36. 9
France	115, 731	6. 7	184, 800	9. 2	120, 542	7. 3	160, 015	7. 1	205, 206	7. 1	210, 397	7. 3	985, 772	7. 4
Ireland	430	0	979	. 1	1, 283	. 1	1, 487	. 1	2, 762	. 1	3, 670	. 1	10, 561	0
Italy	205, 436	11. 9	189, 325	10. 6	168, 911	9. 6	190, 677	8. 5	249, 020	8. 6	248, 750	8. 7	1, 252, 119	9. 4
The Netherlands	68, 007	5. 1	85, 673	4. 8	97, 014	5. 5	123, 761	5. 5	153, 181	5. 3	147, 907	5. 1	695, 543	5. 2
United Kingdom	102, 278	5. 9	96, 463	5. 4	88, 874	5. 0	108, 092	4. 8	123, 748	4. 3	129, 540	4. 5	648, 995	4. 9
European Community, Subtoal	1, 187, 581	----------	1, 182, 355	----------	1, 178, 220	----------	1, 523, 678	----------	1, 960, 352	----------	2, 024, 205	----------	9, 063, 391	68. 3
Austria	272, 374	15. 8	270, 061	15. 1	249, 833	14. 2	301, 946	13. 5	375, 312	13. 0	353, 923	12. 3	1, 823, 449	13. 7
Canada	7, 313	. 4	6, 772	. 4	6, 124	. 3	7, 692	. 3	6, 921	. 2	11, 915	. 4	46, 774	. 4
Finland	25, 136	1. 5	29, 695	1. 7	36, 754	2. 1	44, 021	2. 0	58, 582	2. 0	58, 138	2. 0	252, 327	1. 9
Japan	24, 676	1. 4	32, 364	1. 8	33, 638	1. 9	48, 700	2. 2	53, 922	1. 9	49, 063	1. 7	242, 363	1. 8
Norway	11, 811	. 7	8, 928	. 5	9, 555	. 5	9, 741	. 4	12, 005	. 4	11, 321	. 4	63, 361	. 5
Sweden	61, 836	3. 6	75, 005	4. 2	79, 254	4. 5	95, 251	4. 3	123, 610	4. 3	114, 872	4. 0	549, 828	4. 1
Switzerland	80, 844	4. 7	102, 725	5. 8	107, 527	6. 1	130, 094	5. 8	183, 498	6. 4	171, 734	6. 0	776, 422	5. 9
United States	56, 176	3. 3	76, 054	4. 3	62, 960	3. 6	79, 717	3. 6	97, 682	3. 4	77, 588	2. 7	450, 177	3. 4

Source: U.N. trade data, magnetic tapes.

TABLE A-10.—COMPOSITION OF HUNGARIAN EXPORTS TO THE INDUSTRIALIZED WEST, 1974–79

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	Percent of total, 1979	Average annual growth (percent)
Total, all products	$1,292.8	$1,203.0	$1,379.0	$1,593.5	$1,784.2	$2,385.1	100.0	13.0
Foodstuffs (SITC 0, 1, 4)	422.8	423.0	412.0	475.4	560.8	610.8	25.6	7.6
Meat and meat products	112.5	160.2	155.6	177.8	210.5	229.0		
Live animals	108.3	82.5	77.7	68.8	100.0	100.3		
Fruits and vegetables	67.9	74.4	62.2	86.5	90.4	92.7		
Other	134.1	105.9	116.5	142.3	159.9	188.8		
Crude materials (SITC 2)	118.4	104.5	118.7	138.7	170.4	209.7	8.8	12.1
Crude animal and vegetable materials	23.9	25.4	31.3	40.9	43.7	60.9		
Metal ores and scrap	24.6	14.4	15.3	20.0	42.0	59.5		
Wood, lumber, and cork	41.2	36.9	40.4	41.5	37.7	42.1		
Other	28.7	27.8	31.7	36.3	47.0	47.2		
Mineral fuels (SITC 3)	27.2	24.5	45.6	74.0	51.2	134.5	5.6	37.7
Petroleum and petroleum products	24.2	21.4	34.1	61.7	35.3	120.1		
Other	3.0	3.1	11.5	12.3	15.9	14.4		
Chemicals (SITC 5)	85.6	83.7	103.8	128.0	132.2	211.5	8.9	19.8
Elements and compounds	61.0	57.9	68.9	81.1	85.4	129.7		
Plastics	5.2	5.0	7.3	9.3	12.7	27.3		
Chemical fertilizers	3.4	3.1	5.9	10.4	9.6	20.3		
Other	16.0	17.7	21.7	27.2	24.5	34.2		
Basic industrial goods (SITC 6)	273.5	210.1	294.0	293.8	279.0	439.6	18.4	10.0
Iron and steel	112.6	71.7	122.6	107.0	76.8	150.7		
Textile yarns and fabrics	50.6	43.0	50.7	63.1	62.4	81.2		
Nonferrous metals	53.0	33.3	49.5	36.8	38.9	66.7		
Aluminum	31.4	22.0	32.1	23.3	27.4	45.4		
Other	57.3	62.1	71.2	63.6	100.9	141.0		
Machinery and transport equipment (SITC 7)	82.9	101.9	125.2	148.0	185.6	268.8	11.3	26.5
Electrical machinery	47.5	55.9	70.6	84.9	100.7	121.1		
Nonelectrical machinery	26.6	34.7	38.3	45.1	64.6	99.8		
Transport equipment	8.8	11.4	16.3	17.9	20.2	47.9		
Miscellaneous manufactures (SITC 8)	267.5	241.9	266.6	320.1	385.9	483.5	20.3	12.6
Clothing	153.3	170.7	190.9	219.4	265.1	337.9		
Furniture	16.8	18.2	19.1	30.9	37.2	43.7		
Other	97.4	53.0	56.6	69.8	83.6	101.9		
Other (SITC 9)	14.9	13.4	13.1	15.5	19.1	26.7	1.1	12.4

Source: U.N. trade data, magnetic tapes.

TABLE A-11.—LEADING HUNGARIAN EXPORTS TO THE INDUSTRIALIZED WEST

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
84	Clothing	1	$337,867	14.2	----------	$265,108	14.9	----------	$219,429	13.8	----------
01	Meat and meat preparations	2	229,001	9.6	----------	210,454	11.0	----------	177,793	11.2	----------
67	Iron and steel	3	150,714	6.3	----------	76,755	4.3	----------	107,010	6.7	----------
51	Chemical elements and compounds	4	129,701	5.4	----------	85,404	4.8	----------	81,082	5.1	----------
33	Petroleum and petroleum products	5	121,084	5.1	40.6	100,743	5.6	41.4	84,893	5.3	42.1
00	Live animals	6	120,056	5.0	----------	35,333	2.0	----------	61,742	3.9	----------
71	Nonelectrical machinery	7	100,290	4.2	----------	100,070	5.6	----------	68,823	4.3	----------
05	Fruits and vegetables	8	99,796	4.2	----------	64,630	3.6	----------	45,140	2.8	----------
65	Textile yarns and fabrics	9	92,727	3.9	----------	90,412	5.1	----------	86,169	5.4	----------
		10	81,150	3.4	61.3	62,375	3.5	61.2	63,102	4.0	62.5
	5-DIGIT SITC AGGREGATES										
84112	Women's outerwear	1	111,181	4.7	----------	88,999	5.0	----------	70,664	4.4	----------
84144	Women's underwear	2	74,114	3.1	----------	53,542	3.0	----------	40,483	2.5	----------
0114	Poultry	3	66,911	2.8	----------	63,763	3.6	----------	53,315	3.3	----------
84111	Men's outerwear	4	66,080	2.8	----------	50,910	2.9	----------	42,272	2.7	----------
3323	Distillate fuels	5	54,631	2.3	15.6	1,791	.1	14.5	18,010	1.1	14.1
7292	Electric lamps	6	46,061	1.9	----------	40,770	2.3	----------	30,509	1.9	----------
01189	Meat and edible offals	7	43,961	1.8	----------	35,563	2.0	----------	27,805	1.7	----------
0012	Sheep, lamps, and goats	8	40,733	1.7	----------	20,081	1.1	----------	23,618	1.5	----------
51212	Hydrocarbons	9	40,253	1.7	----------	22,427	1.3	----------	22,369	1.4	----------
3321	Gasoline	10	34,482	1.4	24.3	13,758	.8	21.9	2,871	.2	20.8
11212	Wine and Grape must	11	33,437	1.4	----------	23,062	1.3	----------	18,313	1.1	----------
0138	Other prepared and preserved meat	12	33,008	1.4	----------	34,342	1.9	----------	26,941	1.7	----------
05102	Leather footwear	13	30,938	1.3	----------	22,817	1.3	----------	17,593	1.1	----------
73289	Motor vehicle parts	14	30,185	1.3	----------	8,052	.5	----------	1,902	.1	----------
0011	Cattle	15	29,842	1.3	30.9	43,724	29.3	16,426	16,426	1.0	25.9
6841	Aluminum alloys, unwrought	16	29,258	1.2	----------	17,005	1.0	----------	13,364	.8	----------
67311	Iron, steel wire rod	17	28,708	1.2	----------	17,148	1.0	----------	20,150	1.3	----------
29196	Bird feathers	18	28,703	1.2	----------	18,302	1.0	----------	18,859	1.2	----------
67341	Iron, steel big sections	19	28,146	1.2	----------	12,616	.7	----------	14,152	.9	----------
08112	Fodder	20	27,608	1.2	36.8	17,399	1.0	34.0	22,889	1.4	31.5
8413	Leather clothes and accessories	21	26,751	1.1	----------	23,217	1.3	----------	21,542	1.4	----------
51285	Heterocyclic compounds	22	25,800	1.1	----------	23,900	1.3	----------	18,812	1.2	----------
82101	Chairs, seats, and parts	23	25,144	1.1	----------	21,556	1.2	----------	18,833	1.2	----------
0134	Sausages	24	24,017	1.0	----------	21,877	1.2	----------	17,724	1.1	----------
72501	Electric refrigerators, domestic	25	21,491	.9	42.0	13,891	.8	39.8	14,747	.9	37.3

Source: U.N. trade data, magnetic tapes.

TABLE A-12.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM HUNGARY, 1974-79

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974-79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$1, 292, 762	100.0	$1, 203, 020	100.0	$1, 378, 950	100.0	$1, 593, 519	100.0	$1, 784, 181	100.0	$2, 385, 101	100.0	$9, 637, 533	100.0
Belgium-Luxembourg	22, 878	1.8	25, 695	2.1	22, 301	1.6	26, 348	1.7	26, 306	1.5	36, 241	1.5	159. 769	1.7
Denmark	25, 119	1.9	26, 506	2.2	38, 837	2.8	31, 577	2.0	29, 410	1.6	41, 756	1.8	193, 205	2.0
Federal Republic of Germany	351, 150	27.2	365, 718	30.4	451, 915	32.8	574, 983	36.1	649, 121	36.4	922, 972	38.7	3, 315, 859	34.4
France	75, 620	5.9	92, 278	7.7	98, 935	7.2	118, 912	7.5	121, 541	6.8	153, 587	6.4	660, 943	6.9
Ireland	2, 662	.2	2, 212	.2	1, 957	.1	2, 926	.2	2, 946	.2	4, 755	.2	17, 428	.2
Italy	229, 099	17.7	214, 840	17.9	211, 620	15.3	235, 669	14.8	276, 278	15.5	330. 363	14.2	1, 506, 869	15.6
The Netherlands	70, 652	5.5	68. 146	5.7	68, 879	5.0	79, 612	5.0	98, 046	5.5	114, 918	4.8	500, 253	5.2
United Kingdom	58, 485	4.5	58, 292	4.8	55, 167	4.0	75, 385	4.7	80, 887	4.5	110, 052	4.6	438, 268	4.5
European Community subtotal	835, 705	-----	853, 687	-----	949, 611	-----	1, 145, 412	-----	1, 284, 535	-----	1, 723, 644	------	6, 792, 594	70.5
Austria	174, 559	13.5	139, 120	11.5	175, 896	12.8	199, 975	12.5	183, 101	10.3	240, 280	10.1	1, 112, 931	11.5
Canada	10, 271	1.2	14, 775	1.2	16, 203	1.2	19, 237	1.2	19, 150	1.1	26, 659	1.1	112, 095	1.2
Finland	25, 976	2.0	28, 136	2.3	31, 771	2.3	28, 719	1.8	34, 122	1.9	48, 630	2.0	197, 356	2.0
Japan	29, 177	2.3	11, 051	.9	12, 136	.9	11, 683	.7	17, 112	1.0	23, 159	1.0	104, 318	1.2
Norway	15, 829	1.2	14, 713	1.2	19, 262	1.4	18, 721	1.2	19, 321	1.1	19, 729	.8	107, 575	1.1
Sweden	47, 545	3.7	55, 066	4.6	56, 795	4.1	61, 107	3.8	62, 777	3.5	90, 363	3.8	373, 653	3.9
Switzerland	72, 491	5.6	51, 820	4.3	68, 262	5.0	62, 080	3.9	89, 996	5.0	90, 750	3.8	435, 399	4.5
United States	75, 407	5.8	34, 652	2.9	49, 014	3.6	46, 585	2.9	74, 067	4.2	121, 887	5.1	401, 612	4.2

Source: U.N. trade data, magnetic tapes.

TABLE A-13.—PROJECTED 1985 HUNGARIAN TRADE WITH THE INDUSTRIALIZED WEST

[Dollar amounts in millions]

	1979		Projected 1985		Projected average annual growth rate, 1980-85 (percent)
	Amount	Percent of total	Amount	Percent of total	
Imports from IW	$2,872.8	100.0	$3,850	100.0	5
Foodstuffs (SITC 0, 1, 4)	129.7	4.5	131	3.4	(1)
Crude materials (SITC 2)	155.7	5.4	181	4.7	3
Mineral fuels (SITC 3)	29.8	1.0	50	1.3	9
Chemicals (SITC 5)	643.9	22.4	666	17.3	1
Basic industrial goods (SITC 6)	775.5	27.0	851	22.1	2
Machinery and transport equipment (SITC 6)	930.3	32.4	1,656	43.0	10
Miscellaneous manufactured goods (SITC 8)	169.5	5.9	231	6.0	5
Other (SITC 9)	38.4	1.3	85	2.2	14
Exports to IW	2,385.1	100.0	3,383	100.0	6
Foodstuffs (SITC 0, 1, 4)	610.8	25.6	761	22.5	4
Crude materials (SITC 2)	209.7	8.8	291	8.6	6
Mineral fuels (SITC 3)	134.5	5.6	166	4.9	4
Chemicals (SITC 5)	211.5	8.9	376	11.1	10
Basic industrial goods (SITC 6)	439.6	18.4	467	13.8	1
Machinery and transport equipment (SITC 7)	268.8	11.3	578	17.1	14
Miscellaneous manufactured goods (SITC 8)	483.5	20.3	704	20.8	6
Other (SITC 9)	26.7	1.1	41	1.2	7
Trade turnover	5,257.9		7,233		
Balance	—487.7		—467		

TABLE A-14.—PROJECTED 1985 UNITED STATES-HUNGARIAN TRADE

[Millions of U.S. dollars]

	1980	1981	Projected 1985
U.S. exports	79.0	77.5	94
Foodstuffs	19.7	3.0	18
Crude materials	4.8	10.0	9
Mineral fuels	(1)	(1)	(1)
Chemicals	9.2	16.0	16
Basic industrial goods	11.8	8.7	11
Machinery and transport equipment	26.5	34.3	32
Miscellaneous manufactured goods	6.5	4.6	6
Other	.5	.7	1
U.S. imports	107.5	128.6	162
Foodstuffs	29.8	31.6	36
Crude materials	.8	2.1	3
Mineral fuels	0	0	0
Chemicals	6.1	7.3	13
Basic industrial goods	9.1	8.1	11
Machinery and transport equipment	38.6	58.[illegible]	68
Miscellaneous manufactured goods	22.8	19.7	27
Other	.3	1.0	2
Trade turnover	186.5	206.1	256
Balance	—28.4	—51.1	—68

[1] Negligible.

Source: 1980 and 1981 data from U.S. Census Bureau.

NORTH KOREA: PERFORMANCE AND PROSPECTS IN TRADE WITH THE UNITED STATES AND THE WEST

By Linda S. Droker

CONTENTS

Page

Summary and Introduction 182
I. DPRK Objectives and Performance in Trade During the 1970's 184
II. Hard-Currency Debt at Yearend 1980 187
III. Hard-Currency Trade Objectives and Strategy, 1981–85 188
IV. Hard-Currency Export Capabilities, 1981–85 190
V. Hard-Currency Trade and Debt Outlook, 1981–85 191
VI. Legal Constraints on U.S.-DPRK Trade 192

TEXT TABLES

1. DPRK Foreign Trade by Major Areas 185
2. Estimated Gold Sales in the DPRK's Trade with the West 186
3. DPRK Position vis-a-vis Bank for International Settlements 188

APPENDIX TABLES

A–1. DPRK Foreign Trade by Major Trading Groups, 1970–79 193
A–2. DPRK Hard-Currency Trade, 1970–79 193
A–3. U.S.-DPRK Trade, 1974–80 194
A–4. DPRK Trade with the West and U.S., 1974–80 194
A–5. Composition of DPRK Imports from 31 Western Countries, 1974–80 195
A–6. Leading DPRK Imports from 31 Western Countries 196
A–7. Origins of Leading DPRK Imports from 31 Western Countries 197
A–8. Export Trade Shares of 31 Western Countries to the DPRK, 1974–80 198
A–9. Composition of DPRK Exports to 31 Western Countries, 1974–80 199
A–10. Leading DPRK Exports to 31 Western Countries 200
A–11. Import Trade Shares of 31 Western Countries from the DPRK, 1974–80 201
A–12. Projected 1985 DPRK Trade with the West 202

SUMMARY AND INTRODUCTION

The Democratic People's Republic of Korea (DPRK) is an industrializing communist nation rich in coal and a number of nonferrous metals and minerals. GNP, estimated at $15.8 billion in 1980, grew at an average annual rate of 7 percent in real terms between 1960 and 1980.

The DPRK's economic development, as well as its general foreign policy outlook, is based on the principle of *chuch'e* (self-reliance). First enunciated by President and Party Chief Kim Il-sung in 1955, this principle was designed to maximize Pyongyang's freedom of maneuver by promoting a strong economy not dependent on massive aid from either China or the U.S.S.R. The application of the *chuch'e*

6

principle resulted in a highly isolated economy, with extremely high levels of defense spending (15–20 percent of GNP as late as the mid-1970's), tight rationing of consumer goods, including foodstuffs, and, until the late 1960's very little foreign trade outside the communist bloc.

The slackening of the industrial growth in the latter part of the 1960s, coupled with the phenomenal growth in the capitalist South, impelled the Kim leadership to reconsider its policy of economic isolation from the West. To achieve the technological modernization necessary for rapid industrial growth, provision was made—for the first time—for large-scale imports of capital equipment from Japan and Western Europe. Hard-currency imports, which stood at $55 million in 1970, jumped to $725 million in 1974. However, exports failed to keep pace with imports, due to a softening of world markets for magnesite, lead, zinc, tungsten, and other metals on which Pyongyang's hard currency earnings depended. Unable to service a growing debt (estimated at $2 billion by 1980), the DPRK fell into arrears. Although its creditors continually rescheduled Pyongyang's debt throughout the 1970's, repayments frequently were not made on schedule. Pyongyang's generally cavalier attitude toward its international financial obligations has resulted in many suppliers now requiring cash payment for their exports.

North Korea's two-way trade with a sample of 31 Western countries peaked at $932.4 million in 1974. Trade fell during 1975–77, the period of the debt crisis, but gradually rose again in the following years. In 1980, exports by these Western countries reached $543.3 million and imports, $436.8 million. Its most important partner has been Japan, which accounted for 56 percent of its two-way trade with the West and held some 24–26 percent of its hard currency debt in 1980.

The DPRK's trade with the less developed countries has also grown, from 9 percent of total in 1974 to 17 percent in 1979. Trade with communist countries, however, fell slightly from 49 to 43 percent over the same period.

In 1980, over 38 percent of exports from the Western countries, or $207 million, were in the category of machinery and transport equipment, including trucks, machine tools for metal, and mining machinery. Another 25 percent ($135.8 million) of Western exports consisted of basic industrial goods, such as kraft paper, steel pipe, and textiles. Chemicals accounted for 12 percent ($66.1 million) of Western exports. Most of these consisted of pesticides and plastics.

Nearly half of Western imports from North Korea in 1980 ($210.7 million) were nonferrous metals, while about 10 percent ($42.1 million) were iron and steel products.

Western imports from North Korea were $308.9 million in 1979. Over a third of these ($126.7 million) were nonferrous metals, while 14 percent ($43.4 million) were fishery products.

U.S. trade with the DPRK is negligible, due to the continued existence of a U.S. embargo since the Korean War in 1950. Export control regulations require a validated license from the Department of Commerce to export or reexport U.S.-origin goods and technology. License applications are denied as a matter of policy except in highly limited cases. Imports from the DPRK also require licenses from the Treasury; these, too, are denied except in special circumstances.

We project the DPRK's exports to the West to grow by 28 percent on an average annual basis and imports, at 18 percent from 1980–85. Thus in 1985 Korean exports could reach $1.1 billion and imports, $1.2 billion. In terms of its Seven-Year Plan goals, the DPRK will continue to need mining and construction machinery, metalworking machine tools, agrochemicals, and specialty steels from the West. However, it has only limited access to international sources of borrowing and hence must pay from its imports almost solely through its export earnings. Delays in construction, inefficiencies in the use of technologically advanced Western machinery, and the obligation to export much of its produce to the U.S.S.R. and China will likely restrain the growth of North Korean exports to the West in the coming years. Diversification of its export base is vital if it is to attain steady growth of earnings, while development of a more responsible attitude by the North Korean Government toward repayment of its debts will be essential in increasing the amount of credit available for imports.

I. DPRK Objectives and Performance in Trade During the 1970's

A. TRADE OBJECTIVES

The DPRK's economic objectives with the West in the past decade were shaped as much by political pressures as by economic needs. One such pressure was to avoid taking sides in the Sino-Soviet conflict. Kim has long been adept at balancing his relations with both powers, receiving project assistance, soft loans, and concessionary trade treatment from both. However, reductions in some of this assistance, particularly from the U.S.S.R., as well as the need to acquire high-technology industrial goods, compelled Kim and his colleagues to turn to the West.

The North also felt strongly the pressure of competition from the South. Pyongyang led Seoul in per capita GNP well into the 1970's; but while the North's GNP doubled between 1966 and 1976, the South's tripled during that period. In the ideological contest as to which system provides the greater economic growth or the higher standard of living, Pyongyang's leaders could not afford to fall behind the South, and so wished to utilize Western capital imports to fuel growth.

As the foregoing suggests, the DPRK's primary commercial objective with the West during the past decade was to secure advanced capital equipment in order to expand industrial output and GNP at the desired rates. The goal of industrial expansion included the generation of sufficient foreign exchange to pay for these imports. The inability to do so thus far has necessitated another North Korean goal with respect to the West: improving its international creditworthiness. Observers of the Sixth Congress of the Korean Workers Party noted efforts to present an image of stability and responsibility to foreign audiences. On the more practical side, Pyongyang still seeks further agreements on debt rescheduling with its Western trading partners.

Whatever the objectives the DPRK may have towards the West, none can be extended to the United States at present. U.S. export regulations prohibit the approval of export licenses except in limited circumstances, and U.S. imports are also severely restricted.

B. TRADE PERFORMANCE

Tables 1 and A–1 demonstrate the extent to which the DPRK, which earlier traded almost exclusively with other communist countries, broadened its economic ties with the West during the 1970's. As Pyongyang publishes no foreign trade or debt statistics of its own, this analysis relies entirely upon partner data.

Whereas in 1970, 14 percent of North Korea's imports came from non-communist countries, in 1974 the figure had jumped to 58.3 percent, falling to 43.8 percent in 1979. Exports to non-communist countries rose from 22.6 percent of all exports in 1970 to a peak of 49 percent in 1976, falling slightly to 42.5 percent in 1979.

The DPRK's growing trade with non-communist countries has itself shown a marked trend in favor of the less developed countries over the developed countries. Between 1974 and 1979, exports to the former increased at an average annual rate of 22.5 percent, while exports to the latter increased by only 8.8 percent annually. Imports from LDCs grew by 15.7 percent annually during this period, while those from developed countries, fell at an average annual rate of 9.4 percent. Throughout the 1970's, Pyongyang registered trade surpluses with the less developed countries which have offset to some degree the deficits with the developed countries. (See Table 1). The DPRK's positive showing in trade with the LDCs reflects several factors, political as well as economic. The policy goal of obtaining a leadership role within the nonaligned movement requires that Pyongyang establish and increase its presence in the Third World, by trade and aid as well as by propaganda declarations.

Another facet of this desire to win influence among LDCs is arms sales. The U.S. Arms Control and Disarmament Agency estimates that North Korean arms exports rose from 0 in 1974 to $10 million in 1975, $80 million in 1976, $20 million in 1977, and $70 million in 1978. Given the reluctance of either side to publish such statistics, it is likely that they underestimate actual arms sales.

TABLE 1.—DPRK FOREIGN TRADE BY MAJOR AREAS

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	[1] 1979
Exports (c.i.f.)	727	851	666	675	1,027	1,320
Of which:						
Communist	439	479	341	444	631	760
Non-Communist	288	372	326	231	396	560
Developed	190	176	151	116	196	290
Less developed	98	196	175	115	200	270
Imports (f.o.b.):						
Of which:						
Communist	519	576	512	482	534	730
Non-Communist	725	491	314	299	416	570
Developed	638	430	261	231	285	390
Less developed	87	61	53	68	131	180
Balance	−517	−216	−159	−106	77	20
Communist	−80	−97	−171	−38	97	30
Non-Communist	−437	−119	12	−68	−20	−10
Developed	−448	−254	−110	−115	−89	−100
Less developed	11	135	122	47	69	90

[1] Preliminary figures.

Source: U.S. Government.

On the economic side, North Korean exports of manufactured goods have fared better in LDC than in developed-country markets because of the greater ease of market penetration in the former case. The relative lack of technological sophistication of some LDC markets make North Korean manufactures more saleable there than in Western industrial countries, where they are generally considered inferior to domestic products or to products imported from other Western nations. The data in Table A–1 suggest another trend in total North Korean trade: a renewed increase in the proportion of trade with other communist countries. Pyongyang has long imported oil from both the U.S.S.R. and China, generally at concessionary prices, as well as heavy machinery and grain from the Soviet Union. Part of the upswing on the import side, however, may be due to increased oil prices. On the export side, the communist countries' habit of ensuring eventual bilateral balance in their trade with one another suggests that Pyongyang is probably attempting to offset the deficits of previous years.

The following analysis of the DPRK's trade performance with the West is based on trade data reported by thirty-one industrialized non-communist countries, accounting for about 80–90 percent of the DPRK's trade with non-communist countries throughout most of the period 1974–79. These countries, which are listed in Tables A–8 and A–11, will be designated as the West for purposes of this analysis.

Because of the imbalances in the DPRK's trade discussion above, its trade performance with the West over this period was highly uneven. Thus exports to the West, which grew at an average annual rate of 8.8 percent during 1974–80, fell 13.6 percent annually during 1974–77 (the period of adjustment to the deficit and debt situation) but rose 37.2 percent per year over the period 1977–80. Likewise, imports fell 3.4 percent per year over 1974–80, falling 29.2 percent annually during the adjustment period but rising 31.9 percent annually during the recovery period.

In addition to this merchandise trade, the DPRK exports small quantities of gold bullion to the West. Over the 1974–79 period these sales, estimated at $134 million, were enough to offset 14 percent of its trade deficit with the West. The shares of estimated annual gold sales in Pyongyang's exports to and deficits with the West are given below:

TABLE 2.—ESTIMATED GOLD SALES IN THE DPRK'S TRADE WITH THE WEST

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Exports	$262.8	$308.9	$180.1	$169.3	$253.2	$308.9
Gold sales	$19.5	$27.1	$20.3	0	$27.1	$40.2
Gold as percent of exports	7.4	8.8	11.3	0	10.7	13.0
Trade deficit	−$406.8	−$156.4	−$108.5	−$67.5	−$80.8	−$137.2
Gold as percent of deficit	4.8	17.3	18.7	0	13.2	29.3

Sources: Estimated from U.N. trade data, magnetic tapes; and IMF, "Direction of Trade Yearbook," 1980

In terms of the objective of acquiring advanced industrial goods from the West, the DPRK's performance was mixed. Altogether, it imported $588.2 million worth of machinery and transport equipment (SITC 7) from the West in 1974 and 1975—over half of all imports from the West for those years. However, various structural constraints (to be discussed below) in the North Korean economy have tended to delay or prevent some of the equipment from being brought onstream. Thus a good portion of these initial expenditures on machinery imports was wasted.

Moreover, Pyongyang was forced to cut back on machinery imports in succeeding years, with the result that the 1977 figure represented a drop of 72.7 percent over the 1975 figure (see Table A–5). By 1979, however, machinery imports had risen sharply again, nearly doubling since 1977.

While the bulk of its imports fall into the heavy machinery category, the fraction of all Western imports which can be classified as high technology is much lower. Table A–4 gives the values of the DPRK's high-technology imports from the West over the period 1974–79. The proportion of these imports out of total Western imports peaked at 24.4 percent in 1976, and was as low as 6.3 percent in 1978. It is thus apparent that in its drive for increased capital efficiency, Pyongyang has concentrated on acquiring the most basic types of industrial goods. One reason for this is that North Korea's industrial development, like that of other communist countries, has been extensive, rather than intensive. This implies a development strategy which relies on the duplication of existing technology in greater quantity, rather than on the acquisition of the latest technology to increase capital efficiency. Pyongyang's near-total isolation from Western scientific and technological developments further hinders its capacity to absorb high technology.

In addition, on the supply side, COCOM restrictions prevent Western countries from exporting many types of high-technology commodities which may have dual civilian-military applications.

The DPRK's goal of restored international creditworthiness has been only partially fulfilled. It appears to be adhering to its latest refinancing agreement with its Japanese creditors, but it is again in arrears on some of its Western European debt.

The DPRK does not belong to the IMF or the World Bank and thus cannot tap these sources of international assistance, either for balance-of-payments aid or for long-term development assistance. It has recently received some project-specific aid from the UNDP, but the amount was small and would have no effect on its balance of payments problem.

II. HARD-CURRENCY DEBT AT YEAREND 1980

By the end of 1980, Pyongyang's hard currency debt stood at about $2 billion. Japan is the chief Western creditor with some $400–$500 million due from the North Korean Foreign Trade Bank.

As discussed above, the DPRK's inability to manage its hard currency debt in the mid-1970's necessitated continual rescheduling with its major creditors. For example, one agreement was concluded in 1976 with its Japanese suppliers. However, the DPRK made only two of its 1977 payments. Finally, in October 1979, Pyongyang and its creditors reached another refinancing agreement, whereby the North Koreans agreed to pay 60 percent, or $45 million, in overdue interest charges by December 1979 and the rest by June 1980. Pyongyang was given ten years in which to repay the total debt in semiannual installments of approximately $27.5 million each.

TABLE 3.—DPRK POSITION VIS-A-VIS BANK FOR INTERNATIONAL SETTLEMENTS

[Millions of U.S. dollars]

	YEAREND—			
	1977	1978	1979	1980
Gross debt	560	586	674	581
Assets	47	313	245	177
Net debt	513	273	429	404

Source: "International Banking Developments—Fourth Quarter 1980," Bank for International Settlements, Monetary and Economic Department.

III. HARD CURRENCY TRADE OBJECTIVES AND STRATEGY, 1981–85

A. OBJECTIVES

Yearend 1980 data from the Bank for International Settlements show a total of $581 million in North Korean liabilities to the Western commercial banks, of which $198 million matures in one year or less.

The DPRK's overall economic objectives for the next four years are set forth in its Seven-Year Plan (1978–84), which was announced in a speech by Kim Il-song at the Sixth Supreme People's Assembly in December 1977. The targets, while less ambitious than those of the previous Plan, are still high, and most analysts believe that the planned growth rates cannot be achieved in full. The Plan calls for 10 percent annual GNP growth, with industrial production to grow 2.2 times and consumer goods production, 2.1 times by 1984. In addition to the Plan targets for 1984, President Kim in his 1981 New Year speech outlined a series of "long-range goals of socialist economic construction" to be met by 1990. These goals envision renewed rapid growth: a doubling of electricity, steel, and textile production over the 1984 targets, a 50–70 percent increase in coal production, and 50 percent rises in nonferrous metals and grain output. South Korean analysts have estimated that such growth will require $24 billion of investment, only $10.5 billion of which can be generated domestically (see *Far Eastern Economic Review*, June 26, 1981).

The language of the Plan reveals an understanding of the need to reduce imports by relying on increased labor productivity, elimination of transport bottlenecks, and the "scientification" of the economy to raise import-substitute production.

The Plan cites as most vital targets in electricity, steel, machine tools, mining, chemicals (especially plastics and agricultural chemicals), and building materials. Increased consumer production, especially in areas of chronic shortage like sugar and cooking oil, is also emphasized. Among these areas of planned investment, minerals and metals, building materials, foodstuffs, and some light manufacturers hold forth the best promise for export expansion.

However, in spite of rhetoric favoring reliance on domestic resources, it is difficult to see how Pyongyang can even approach some of these targets, given their vast investment requirements, without continuing its previous policy of importing Western industrial goods.

Since an additional goal is to eliminate all foreign debt by 1984, Pyongyang has planned to quadruple exports by that year, mainly by expanded exports of metal ores and mineral products. However, while exports of such products (SITC 27, 28, 32, 67, and 68) accounted for 68 percent of North Korea's exports to the West in 1980, they covered only 55 percent of its import bill that year. Thus it will be necessary for Pyongyang to improve export performance in the more profitable manufactures sector in order to attempt to meet both its debt payments and its import bills over the next few years.

B. IMPORT NEEDS

The Plan is only one determinant of the DPRK's likely import needs from the West in 1981–85; past performance, as indicated in Table A–5, is another.[1]

The DPRK's greatest import need over the next five years will remain *machinery and transport equipment.* Imports of these goods accounted for 38 percent of all imports from the West in 1980. The most significant commodities in this category were trucks, machine tools for metalworking, excavating machinery, and industrial heating and cooling equipment. While machinery imports fell by 5.1 percent annually from 1974 to 1980, they rose faster in 1977–80 then they fell in the preceding three years. This suggests that, given appropriate credit conditions and the likelihood of shortfalls in domestic production, there is still room for growth in machinery imports.

Basic industrial goods accounted for 25 percent of imports from the West in 1980. They were led by paperboard, iron and steel tubing, and miscellaneous metal manufactures. As with heavy machinery imports of basic manufactures rose at a higher average annual rate in 1977–80 than they fell in 1974–77, without yet returning to 1974 levels. Domestic production of synthetic fabric should reflect increased capacity of such units as the vinylon plant at Hungnam, and any excess will likely be exported. Thus, imports of synthetic fabric should decline. Steel production is limited largely to primary forms: hence there will continue to be a need for imported Western specialty steels.

Chemical imports, led by pesticides, chemical elements and compounds, and plastics, accounted for 12.2 percent of 1980 imports. They grew at positive rates through most of the 1974–80 period, testifying to the continuing need for such products as pesticides even in the face of hard-currency constraints. Prospects for markedly improved production depend on the ability to import plant and petroleum. Thus, in the near term, Western imports, especially of plastics and chemical elements and compounds, will remain necessary.

Imports of *crude materials*, particularly rubber and synthetic fibers, constituted 5.3 percent of imports in 1980. They grew by 25.4 percent annually over the entire period, but peaked in 1979 at $40.4 million. Despite specific mention in the Plan of increased attention to domestic rubber and synthetic production, continued imports (though possibly at a slower rate if domestic production can grow to meet industry's needs) are likely for the future.

---

[1] Because of fluctuations in both imports and exports over 1974–80, the analysis will take into account both average annual growth rates for 1974–80 and the higher recovery-period (1977–80) rates, each of which may be misleading if taken alone.

Foodstuffs, at 8.8 percent of 1980 imports, have been decreasing in importance over time. Their largest components tend to be wheat, sugar, and soybean oil, and these fluctuate irregularly from year to year. However, any genuine attempt to improve consumer welfare in the DPRK over the next five years would probably imply a small average annual growth rate in food imports.

C. CONSTRAINING FACTORS ON DPRK IMPORTS FROM THE WEST

Before assuming that the DPRK can continue to import large quantities of expensive machinery, several likely constraining factors should be taken into account. First among these is the hard currency shortage. Failure to rectify its trade imbalances, especially if Pyongyang cannot obtain the necessary import financing, will mean diminished production and growth rates throughout the economy.

Another constraining factor is the economy's absorptive capacity. One aspect of this has already been mentioned—the technological backwardness associated with national isolationism. This has led to quarantining of foreign technical advisers, whose task of transferring Western technology is thus made more difficult.

Another problem of absorption lies in inadequate infrastructure. The country needs more ships and trucks to bring imported equipment to end-users. Unless planned increases in shipbuilding, truck manufacturing, rail links and port improvements are achieved, there will continue to be delays in plant startups and distribution of goods.

IV. Hard Currency Export Capabilities, 1981–85

A. COMPOSITION OF RECENT EXPORTS AND FUTURE PROSPECTS

Table A–9 indicates the commodity composition of exports to the West during 1974–80. As with imports, the general economic disorder accompanying the debt crisis and world recession facilitated a sharp drop in exports over 1974–77. In 1976 alone, exports fell by 41.7 percent over 1975. However, this drop was followed by an equally rapid rise, as exports grew by nearly 50 percent in 1978, 22 percent in 1979, and 41 percent in 1980.

Basic industrial goods accounted for 60 percent of North Korean exports to the West in 1980, with nonferrous metals—especially lead, zinc, and Silver—constituting 80.2 percent of basic industrial exports to the West. World price conditions caused the value of nonferrous metal exports to fall almost 30 percent between 1975 and 1977. For example, between 1974 and 1975, the price of lead fell by 30 percent, that of zinc by nearly 40 percent, and that of silver by 6 percent. Subsequent high metals prices, especially in 1979 and 1980, help account for the sharp (221 percent) increase in the value of these exports in 1977–80.

Another important commodity in this category, iron and steel, fared poorly over the period showing improvement only in 1980. Exports, which had peaked at $50 million in 1975, stood at half that level in 1979, rising to $42.1 million in 1980. Most steel production for export consists of pig iron, heavy plate, and blooms. Because Pyongyang recognizes the importance of such goods in exporting, planned investment will probably ensure continued exports in the future, although again, the shortage of imported blast furnaces and rolling mills may hinder growth.

Foodstuffs constituted 16.8 percent of exports to the West (in this case, primarily to Japan, Hong Kong, and Indonesia) in 1980. The unpredictability of agricultural production has made North Korea's foodstuff exports, like its imports, highly volatile. Thus, foodstuffs exports have ranged from less than 13 percent of total exports to the West in 1976 to over 38 percent in 1978. (Also, some foodstuffs are exported to the Soviet Union or to other countries outside the data base, thus eliminating them from hard currency trade.) While overall exports fell slightly during the period, due in large part to diminished rice shipments, some commodities, such as fish products and preserved vegetables, registered significant gains. Because North Korean agriculture is already technologically advanced, with a high degree of mechanization, irrigation, and application of chemical fertilizers, annual grain output, and hence exports, will probably level off. However, given planned investment in fisheries, overall food exports are likely to grow at rates similar to those of the recent past.

Crude materials accounted for 17.8 percent of 1980 exports, growing at an average annual rate of 8.6 percent from 1974–80. Most important were crude fertilizers and minerals (magnesite, talc), metallic ores and scrap (zinc ore), miscellaneous animal and vegetable materials, and silk. Because of the Plan's emphasis on mineral commodities, exports from this sector should do as well as or better than they did over the whole period.

B. CONSTRAINING FACTORS ON DPRK EXPORTS TO THE WEST

A number of economic and structural factors constrain potential export growth in each of these areas. The primary constraint on increasing production is the need for imported inputs. Mining and steel production in particular require heavy machinery which will likely not be produced domestically in sufficient quantities for years to come.

Another important constraint on productive investment and output has been military spending. During the 1970's, defense spending accounted for 15–20 percent of GNP. Arms production and the construction of underground shelters for military and industrial plant have absorbed a large share of industrial output during the past decade. In addition, U.S. analysts estimate that some 12 percent of the male population between the ages of 17 and 49 is in the military, contributing to chronic labor shortages in both industry and agriculture.

A third problem is energy. North Korea relies principally on coal-fired thermal power and hydroelectric power for most of its electricity production. (About 5 percent of its energy needs are supplied by imported oil.) Production problems in coal mining, the weather—droughts in 1977 affected power generation enough to be a factor in squeezing industrial production that year—and the high cost of imported oil all play a role in limiting the DPRK's export capabilities.

V. HARD CURRENCY TRADE AND DEBT OUTLOOK, 1981–85

Given the foregoing analysis, it is possible roughly to project North Korean trade with the West through 1985. The volume of nonferrous metals exported to the West will continue to depend on (1) the ability to import mining machinery, (2) the ability to utilize this machinery effectively, and (3) the need to export these metals to the Soviet Union and China in order to fulfill long-term bilateral trade protocols. In addition, world price fluctuations will affect earnings from these exports. Moreover, likely delays in plant construction should prevent exports of chemical products and basic industrial goods from growing as rapidly as planned, and basic manufactures, foodstuffs, and crude materials will remain the principal export items. Finished and semifinished manufactures will continue to form the bulk of the DPRK's imports, with mineral fuels possibly increasing in relative importance.

Imports are unlikely to rise as rapidly as in the early 1970s unless Pyongyang can convince its suppliers of its long-term ability to repay credits for the purchase of machinery.

Thus, as table A-12 shows, an estimated 20 percent average annual export growth and 18 percent annual import growth results in 1985 exports to the West of $1.1 billion, imports from the West of $1.2 billion, and a trade deficit of $164 million. Gold sales will probably help offset part of this merchandise deficit.

The preceding trade projections suggest the direction North Korea's hard currency debt will take over the same period. The DPRK is likely to continue to show a trade deficit for the foreseeable future. Added to these annual amounts are the scheduled repayments to Japanese and other Western creditors, as well as interest payments on any new debts which may be incurred. However, the above projections are for trade with only 31 Western countries. The overall trade deficit in 1985 will very likely be less serious because of the DPRK's pattern of trade surpluses with developing countries outside the data base.

Even the moderately optimistic export growth projections given above will be insufficient to cover both imports and debt service if Western countries do not become convinced of Pyongyang's long-term creditworthiness. Much of its importing must now be done on a cash basis. In addition, preliminary 1981 data suggest that the DPRK is undergoing reductions in both exports to and imports from the West. Its trade with the OECD countries (which represent 24 of the 31 countries considered the "West" in this analysis) dropped substantially below 1980 levels. North Korean exports fell nearly 50 percent (from $360 million to $184 million), while imports fell nearly 9 percent (from $504 million to $460 million). The trade deficit nearly doubled, rising from $144 million to $276 million.

A partial solution to the import financing problem would lie in joint ventures or countertrade agreements with Western firms. There appears to be some scope for an arrangement whereby the Western firm would supply, for example, mining machinery and take payment in metallic ores. Until quite recently, Pyongyang has shown little inclination to engage in agreements requiring close cooperation with foreign business personnel or foreign equity investment on its soil. In June 1981, however, the *Far Eastern Economic Review* reported that Pyongyang may now be seeking industrial cooperation agreements with several West European firms in the field of mineral processing. If the North Koreans succeed in concluding any such agreements in the near future, their hard currency situation could improve.

VI. LEGAL CONSTRAINTS ON U.S.-DPRK TRADE

Commercial relations between the U.S. and the DPRK have been under embargo since the beginning of the Korean War. In December

1950, under the authority of the Trading with the Enemy Act of 1917 (later amended), the Treasury Department halted all trade and financial transactions with North Korea.

The legal authority for the embargo on U.S. exports also derives from the succession of Export Administration Acts, the most recent of which was passed in 1979. The Export Administration Regulations implementing the Act classify the DPRK as a "Group Z" country;[2] this means that a validated license from the Department of Commerce is required for export and reexport of all U.S. origin goods and technology. License applications are denied as a matter of policy except in limited cases (e.g., medical supplies). Imports from the DPRK also require licenses from Treasury; these, too, are denied except in special circumstances.

Even without the embargo, other legislative and executive constraints on normalized trade would exist. The U.S. could not, for example, grant most-favored-nation (MFN) tariff status unless Congress felt satisfied that Pyongyang was permitting free emigration, as required under Section 402 of the Trade Act of 1974 (the Jackson-Vanik Amendment). The same requirements hold in order for the U.S. to offer Export-Import Bank or Commodity Credit Corporation (CCC) loans.

APPENDIX

TABLE A-1.—DPRK FOREIGN TRADE BY MAJOR TRADING GROUPS, 1970–79

[Millions of U.S. dollars]

	1970	Percent of total	1974	Percent of total	1978	Percent of total	1979[1]	Percent of total
DPRK imports	391	100.0	1,244	100.0	950	100.0	1,300	100.0
of which:								
Developed countries	47	12.0	638	51.3	285	30.0	390	30.0
Less developed countries	8	2.0	87	7.0	131	13.8	180	13.8
Communist countries	336	85.9	519	41.7	534	56.2	730	56.2
DPRK exports	332	100.0	727	100.0	1,027	100.0	1,320	100.0
of which:								
Developed countries	64	19.3	190	26.1	196	19.1	290	22.0
Less developed countries	11	3.3	98	13.5	200	19.5	270	20.5
Communist countries	257	77.4	439	60.4	631	61.4	760	57.6

[1] Preliminary figures.

Source: U.S. Government.

TABLE A-2.—DPRK HARD-CURRENCY TRADE[1] 1970–79[2]

[Millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	Average annual growth rate, 1974–79 (percent)
Imports	55	725	491	314	299	416	570	−4.6
Exports	75	288	372	326	231	396	560	14.2
Trade turnover	130	1,013	863	640	530	812	1,130	
Balance	20	−437	−119	12	−68	−20	−10	

[1] Includes developed and less developed countries.
[2] Preliminary figures.

Source: U.S. Government.

---

[2] Other Group Z countries are Vietnam, Cambodia, and Cuba; the U.S. does not currently have diplomatic relations with any of the four.

TABLE A-3.—UNITED STATES-DPRK TRADE, 1974-80

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980
U.S. exports	0	0.6	0	0	(1)	(1)	0
of which:							
Agricultural	0	0	0	0	0	0	0
Manufactured [2]	0	.6	0	0	(1)	(1)	0
Other	0	0	0	0	0	0	0
U.S. imports	(1)	(1)	(1)	.1	(1)	.1	0
of which:							
Agricultural	0	0	0	0	0	0	0
Manufactured [2]	(1)	(1)	(1)	.1	(1)	.1	0
Other	0	0	0	0	0	0	0
Trade turnover	(1)	.6	(1)	.1	(1)	.1	0
Balance	(1)	.6	(1)	−.1	0	−.1	0

[1] Negligible.
[2] SITC 5–8.

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-4.—DPRK TRADE WITH THE INDUSTRIALIZED WEST (IW) AND UNITED STATES, 1974-80

[Dollar amount in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980
Imports from IW	$669.6	$465.3	$288.6	$236.8	$334.0	$446.1	$543.3
United States	0	$.6	0	0	(1)	(1)	0
U.S. share (percent)	0	0	0	0	0	0	0
European Community	$242.1	$138.2	$80.8	$41.9	$65.7	$59.6	$58.7
European Community share (percent)	36.2	29.7	28.0	17.7	19.7	13.4	10.8
Of which:							
Foodstuffs [2]	$148.6	$10.9	$34.1	$33.4	$25.4	$39.6	47.7
United States	0	0	0	0	0	0	0
U.S. share (percent)	0	0	0	0	0	0	0
European Community	$75.3	$.6	$1.0	$.2	$11.0	$7.7	$.7
Europeans Community share (percent)	50.7	5.5	2.9	.6	43.3	19.4	1.5
Manufactures [3]	$503.5	$433.3	$237.0	$181.8	$238.1	$330.4	$432.1
United States	0	$.6	0	0	(1)	(1)	0
U.S. share (percent)	0	0	0	0	0	0	0
European Community	$165.7	$132.7	$78.9	$41.4	$42.9	$49.0	$55.0
European Community share (percent)	32.9	30.6	33.3	22.8	18.0	14.8	12.7
High technology	$59.0	$72.0	$70.4	$35.4	$21.0	$55.3	$67.0
United States	0	0	0	0	(1)	0	0
U.S. share (percent)	0	0	0	0	0	0	0
European Community	$33.0	$32.7	$44.6	$15.4	$5.9	$19.2	$19.3
European Community share (percent)	55.9	45.4	63.4	43.5	28.1	34.7	28.8
Exports to IW	$262.8	$308.9	$180.1	$169.3	$253.2	$308.9	$436.7
United States	(1)	(1)	(1)	$.1	(1)	$.1	0
U.S. share (percent)	0	0	0	0	0	0	0
European Community	$55.5	$80.1	$52.9	$44.2	$54.3	$75.7	$114.3
European Community share (percent)	21.0	25.9	29.4	26.1	21.4	24.5	26.2
Trade turnover with IW	$932.4	$774.2	$468.7	$406.1	$587.2	$755.0	$980.1
Balance	−$407.1	−$156.4	−$108.5	−$67.5	−$80.8	−$137.2	−$106.5
Balance with United States	0	−$.6	0	$.1	0	$.1	0
Balance with European Community	−$186.6	−$58.1	−$27.9	$2.3	−$11.4	$16.1	$55.6

[1] Negligible.
[2] SITC 0, 1, 4.
[3] SITC 5–8.

Source: U.N. trade data, magnetic tapes.

TABLE A-5.—COMPOSITION OF DPRK IMPORTS FROM 31 WESTERN COUNTRIES, 1974-80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of 1980 total	Average annual growth (percent)
Imports from industrialized West	$669.6	$465.3	$28.6	$236.8	$334.0	$446.1	$543.3	100.0	−3.4
Foodstuffs (SITC 0, 1, 4)	148.6	10.9	34.1	33.4	25.4	39.6	47.7	8.8	−17.3
Cereals	141.7	9.9	32.5	31.8	6.9	19.1	41.4		
Vegetable oils	5.8	.5	.7	.7	1.9	19.1	4.1		
Livestock feeds	.3	.1	(1)	.2	0	.7	.9		
Fruit and vegetables	.1	(1)	.1	.1	3.8	.3	.4		
Sugar and sugar products	(1)	.1	.1	(1)	10.0	(1)	(1)		
Other	.7	.3	.7	.6	2.8	.4	.9		
Crude materials (SITC 2)	13.0	10.6	12.0	16.1	33.0	40.4	29.0	5.3	14.3
Crude rubber	4.0	.9	1.2	1.1	6.2	16.1	8.6		
Textile fibers	7.0	6.1	5.2	11.7	18.2	14.5	13.7		
Metal ores and scrap	.3	.1	2.4	3.0	6.4	4.1	4.8		
Oil seeds and nuts	0	0	.1	.1	.2	3.4	.2		
Other	1.7	3.5	3.1	.2	2.0	2.3	1.7		
Mineral fuels (SITC 3)	.6	.9	.7	3.4	14.2	16.1	22.7	4.2	83.2
Coal, coke, briquettes	0	0	0	1.5	1.8	10.0	15.9		
Petroleum and petroleum products	.6	.9	.7	1.9	12.4	6.1	6.8		
Chemicals (SITC 5)	33.3	39.1	32.5	37.4	63.6	54.9	66.1	12.2	12.1
Miscellaneous chemical products	3.9	4.5	10.1	14.1	17.3	24.0	27.6		
Pesticides	(2.2)	(2.3)	(9.6)	(13.7)	(16.1)	(22.9)	(26.1)		
Chemical elements, compounds	8.1	3.5	8.0	8.8	14.9	12.8	20.9		
Plastic materials	8.7	7.7	12.0	9.0	21.0	10.5	9.0		
Dyes, tanning products	1.6	.7	1.0	2.9	6.9	5.1	6.2		
Chemical fertilizers	7.7	20.6	.3	.8	1.7	0	(1)		
Other	3.3	2.1	1.1	1.8	1.8	2.5	2.4		
Basic industrial goods (SITC 6)	166.8	75.6	39.2	47.5	75.0	105.7	135.8	25.0	−3.4
Iron and steel	82.0	20.7	11.7	8.8	19.4	32.2	49.9		
Textile yarn and fabric	50.3	10.2	5.2	15.3	14.8	23.0	18.6		
Paper, paper products	11.8	5.7	4.5	5.4	8.7	18.8	25.6		
Miscellaneous metal manufactures	14.3	26.8	8.9	8.1	8.0	12.0	18.5		
Nonferrous metals	1.7	.6	2.1	4.2	12.3	5.9	8.2		
Rubber manufactures	3.3	3.9	3.6	2.8	5.7	5.2	9.3		
Nonmetal mineral manufactures	2.6	7.1	2.6	1.8	4.9	4.8	4.8		
Other	.8	.6	.6	1.1	1.2	3.8	.9		
Machinery and transport equipment (SITC 7)	284.1	304.1	153.6	83.1	86.6	150.6	207.0	38.1	−5.1
Nonelectric machinery	210.8	226.4	113.3	44.2	40.7	63.7	111.6		
Transport equipment	32.3	27.9	13.5	12.6	16.0	49.4	47.7		
Electric machinery	41.0	49.8	26.8	26.3	29.9	37.4	47.7		
Miscellaneous manufactures (SITC 8)	19.3	14.5	11.7	13.8	12.9	19.2	23.2	4.3	−3.1
Instruments, watches, clocks	9.8	8.2	3.5	4.7	4.7	7.8	9.1		
Miscellaneous manufactures	3.1	2.5	3.0	4.4	4.5	6.8	6.8		
Plastic articles	(2.0)	(.9)	(.7)	(.9)	(2.2)	(3.3)	(2.4)		
Furniture	.3	.2	.8	1.2	1.6	2.3	2.7		
Other	6.1	3.6	4.4	3.5	2.1	2.3	4.6		
Other	3.9	9.6	4.8	2.1	23.3	19.6	11.8	2.2	20.3

---

[1] Negligible.

Source: U.N. trade data, magentic tapes.

TABLE A-6.—LEADING DPRK IMPORTS FROM 31 WESTERN COUNTRIES

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Machinery, nonelectric	1	$63,745	14.3		$40,707	12.2		$44,180	18.7	
73	Transport equipment	2	49,444	11.1		15,956	4.8		12,641	5.3	
72	Electrical machinery	3	37,430	8.4		29,931	9.0		26,312	11.1	
67	Iron and steel	4	33,198	7.4		19,354	5.8		8,773	3.7	
59	Chemicals, n.c.e	5	24,036	5.4	46.6	17,303	5.2	36.9	14,121	6.0	44.8
65	Textile yarn, fabric, etc	6	22,957	5.1		14,849	4.4		15,337	6.5	
42	Fixed vegetable oils and fats	7	19,110	4.3		1,912	.6		675	.3	
04	Cereals and cereal preparations	8	19,092	4.3		6,932	2.1		31,837	13.4	
64	Paper, paperboard, and manufactures	9	18,750	4.2		8,686	2.6		5,431	2.3	
93	Special transactions	10	18,459	4.1	68.6	12,880	3.9	50.5	1,967	.8	68.1
	Top 50 total		445,140			323,258			236,614		
	Total imports from Western 31		446,140			334,010			236,829		
	Top 50 as percent of total imports from Western 31		99.8			96.8			99.9		
	5-DIGIT SITC AGGREGATES										
7323	Trucks, assembled or not	1	35,493	8.0		6,585	2.0		8,051	3.4	
5992	Pesticides, disinfectants	2	22,867	5.1		16,055	4.8		13,696	5.8	
9310	Special transactions	3	18,459	4.1		12,880	3.9		1,967	.8	
0410	Wheat (includes spelt) and meslin, unmilled	4	18,159	4.1		6,573	2.0		31,795	13.4	
7151	Machine tools for metal	5	17,342	3.9	25.2	1,438	.4	13.0	11,753	5.0	28.4
4212	Soya bean oil	6	17,061	3.8		1,490	.4		308	.1	
2311	Natural rubber and similar natural gums	7	14,211	3.2		5,025	1.5		938	.4	
26621	Discontinous synthetic fibers, not carded	8	14,120	3.2		11,336	3.4		6,041	2.6	
6413	Kraft paper, paperboard	9	9,887	2.2		2,320	.7		1,747	.7	
6702	Iron, steel tube, seamless, n.e.s	10	9,841	2.2	39.8	2,398	.7	19.8	2,448	1.0	33.2
72952	Electrical measuring, control equipment	11	9,594	2.2		2,103	.6		2,744	1.2	
3218	Coke and semi-coke of coal, lignite, or peat	12	8,971	2.0		735	.2		1,533	.6	
5812	Products of polymerizing, etc	13	8,652	1.9		9,114	2.7		2,546	1.1	
7198	Other machines, nonelectric	14	6,904	1.5		4,878	1.5		3,155	1.3	
65562	Netting of rope, twine	15	6,625	1.5	48.9	2,271	.7	25.5	1,605	.7	38.1
65351	Continous synthetic weaves, nonpile	16	6,200	1.4		2,215	.7		6,027	2.5	
71842	Excavating, leveling, etc., machinery	17	5,493	1.2		1,583	.5		1,332	.6	
71915	Refrigeration equipment, nondomestic	18	4,737	1.1		4,734	1.4		1,208	.5	
3324	Residual fuel oils	19	4,320	1.0		0	0		0	0	
7241	Television receivers	20	3,021	.9	54.4	6,860	2.1	30.1	1,405	.6	42.4
2214	Soya beans (excludes flour and meal)	21	3,397	.8		136	0		0	0	
7321	Passenger motor vehicles, excludes buses	22	3,396	.8		2,122	.6		1,827	.8	
7324	Special motor vehicles, n.e.s	23	3,293	.7		2,637	.8		1,219	.5	
8930	Articles of plastic, n.e.s	24	3,207	.7		2,232	.7		918	.4	
6714	Ferro-manganese	25	3,275	.7	58.2	1,360	.4	32.7	0	0	44.0
	Top 50 total		322,090			151,760			140,681		
	Total imports from Western 31		446,140			334,010			236,829		
	Top 50 as percent of total imports from Western 31		72.2			45.4			59.4		

TABLE A-7.—ORIGINS OF LEADING DPRK IMPORTS FROM 31 WESTERN COUNTRIES

[Dollar amounts in millions of U.S. dollars]

			1979			1977		
1979 item rank	SITC	Description: Origin	Origin rank	Value	Item/origin percent of total	Origin rank	Value	Item/origin percent of total
1	71	Machinery, nonelectric		$63.7	30.7	--------	$44.2	41.7
		Japan	1	41.5	65.1	1	21.9	49.5
		Federal Republic of Germany	2	12.3	19.3	2	4.6	10.4
		Italy	3	5.1	8.0	3	4.5	10.2
		United States	(1)	0	0	(1)	0	0
		European Community		19.7	30.9	--------	13.8	31.2
2	73	Transport equipment		49.4	23.8	--------	12.6	11.9
		Japan	1	46.7	94.5	1	7.1	56.3
		Federal Republic of Germany	2	2.6	5.3	2	5.4	42.9
		United States	(1)	0	0	(1)	0	0
		European Community		2.7	5.5	--------	5.5	43.7
3	72	Electrical machinery		37.4	18.0	--------	26.3	24.8
		Japan	1	27.1	72.4	1	17.7	67.4
		Federal Republic of Germany	2	6.7	17.9	2	7.9	30.0
		France	3	1.2	3.4	3	.2	.6
		United States	(1)	0	0	(1)	0	0
		European Community		9.5	25.4	--------	8.3	31.5
4	67	Iron and steel		33.2	16.0	--------	8.8	8.3
		Japan	1	26.9	81.0	1	7.0	79.9
		Austria	2	4.1	12.2	2	.8	9.2
		Federal Republic of Germany	3	1.8	5.4	3	.7	7.9
		United States	(1)	0	0	(1)	0	0
		European Community		2.1	6.3	--------	.8	9.1
5	59	Miscellaneous chemicals		24.0	11.6	--------	14.1	13.3
		Japan	1	10.1	42.2	1	6.6	47.1
		Switzerland	2	8.6	35.6	2	6.0	42.3
		Yugoslavia	3	3.6	5.1	3	1.4	9.8
		United States	(1)	0	0	(1)	0	0
		European Community		1.5	6.3	--------	1.5	10.6

[1] Greater than 25.

TABLE A-8.—EXPORT TRADE SHARES OF 32 WESTERN COUNTRIES TO THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA, 1974–80

[Dollar amounts in thousands of dollars]

	1974		1975		1976		1977		1978		1979		1980	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$669,551	100.0	$465,323	100.0	$288,581	100.0	$236,829	100.0	$334,010	100.0	$446,140	100.0	$543,304	100.0
Belgium-Luxembourg	18,130	2.7	6,485	1.4	7,497	2.6	5,359	2.3	2,817	.8	1,482	.3	2,239	0.4
Denmark	1,438	.2	19,932	4.3	1,885	.7	708	.3	1,240	.4	597	.1	213	0
Federal Republic of Germany	78,803	11.8	75,629	16.3	41,822	14.5	24,035	10.1	32,818	9.8	33,719	7.6	33,309	6.1
France	98,716	14.7	22,666	4.9	18,763	6.5	5,504	2.3	9,493	2.8	8,000	1.8	4,806	.9
Ireland	0	0	0	0	165	.1	74	0	347	.1	150	0	355	.1
Italy	5,041	.8	12,161	2.6	7,399	2.6	3,256	1.4	7,506	2.2	9,517	2.1	10,515	1.9
The Netherlands	9,903	1.5	1,318	.3	1,573	.5	758	.3	9,852	2.9	4,463	1.0	4,955	.9
United Kingdom	30,101	4.5	0	0	1,669	.6	2,249	.9	1,634	.5	1,719	.4	2,282	.4
European Community subtotal	242,132	----------	138,191	----------	80,773	----------	41,943	----------	65,707	----------	59,646	----------	58,674	----------
Australia	28,778	4.3	3,712	.8	24,544	8.5	33,157	14.0	9,342	2.8	21,425	4.8	40,016	7.4
Austria	24,193	3.6	24,336	5.2	14,302	5.0	1,703	.7	3,588	1.1	6,480	1.5	4,871	.9
Brazil	0	0	0	0	0	0	0	0	1,092	.3	3,397	.8	15	0
Canada	43,574	6.5	4,840	1.0	9,580	3.3	93	0	608	.2	1,514	.3	835	.2
Egypt	3,252	.5	8,117	1.7	5,837	2.0	5,307	2.2	6,116	1.8	0	0	0	0
Finland	31,316	4.7	73	0	17	0	30	0	[illegible]	0	278	.1	1,209	.2
Greece	0	0	1	0	0	0	0	0	[illegible]	0	0	0	1,349	.2
Hong Kong	500	.1	234	.1	426	.1	1,309	.6	1,[illegible]	.5	1,692	.4	374,305	68.9
Indonesia	0	0	19	0	372	.1	1	0	1,411	.4	0	0	3	0
Japan	251,909	37.6	179,632	38.6	96,056	33.3	125,081	52.8	183,347	54.9	283,838	63.6	94	0
New Zealand	280	0	0	0	0	0	0	0	0	0	0	0	402	.1
Norway	2	0	117	0	4	0	0	0	232	.1	2	0	0	0
Pakistan	270	0	1,059	.2	1,514	.5	1	0	1,835	.5	2,618	.6	33,283	6.1
Portugal	41	0	4	0	6	0	0	0	0	0	13	0	3,627	.7
Singapore	21,080	3.1	7,797	1.7	9,450	3.3	9,722	4.1	34,716	10.4	38,068	8.5	7,646	1.4
Spain	1	0	399	.1	41	0	16	0	3,545	1.1	8,940	2.0	9,052	1.7
Sweden	9,914	1.5	66,777	14.[illegible]	23,[illegible]14	8.3	3,686	1.6	2,401	.7	1,987	.4	0	0
Switzerland	3,137	.5	9,973	2.1	10,[illegible]8	3.7	11,659	4.9	14,148	4.2	10,747	2.4	7,923	1.5
United States	0	0	644	.1	0	0	0	0	1	0	13	0		
Yugoslavia	9,172	1.4	19,398	4.2	11,237	3.9	3,121	1.3	4,142	1.2	5,482	1.2		

Source: U.N. trade data, magnetic tapes.

TABLE A-9.—COMPOSITION OF DPRK EXPORTS TO 31 WESTERN COUNTRIES, 1974–80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of 1980 total	Average annual growth (percent)
Exports to industrialized West	$262.8	$308.9	$180.1	$169.3	$253.2	$308.9	$436.8	100.0	8.8
Foodstuffs (SITC 0, 1, 4)	84.2	111.7	23.1	34.5	97.3	72.3	73.2	16.8	−2.3
Fish and fish products	11.6	7.9	10.4	9.2	23.6	43.4	30.1		
Cereals	70.8	98.6	7.1	19.3	56.8	14.8	31.2		
Fruit and vegetables	1.1	2.0	3.6	2.4	10.4	9.7	7.5		
Sugar and sugar products	.1	(1)	.1	(1)	3.6	.1	(1)		
Other	.6	3.2	1.9	3.6	2.9	4.3	4.4		
Crude materials (SITC 2)	47.4	42.8	42.3	41.9	50.6	68.3	77.8	17.8	8.6
Crude fertilizers and minerals	13.9	18.2	16.0	17.0	16.6	27.5	28.1		
Metal ores and scrap	16.7	16.0	11.0	4.9	4.0	13.9	12.0		
Crude animal and vegetable materials	1.3	2.4	5.7	7.2	7.9	10.1	18.1		
Textile fibers	15.1	5.1	5.7	8.3	17.0	10.0	14.1		
Hides, skins, furs	.1	.7	3.5	3.9	4.5	5.4	4.8		
Other	.3	.4	.4	.6	.6	1.4	.7		
Mineral fuels (SITC 3)	8.8	1.2	2.2	1.9	1.4	3.2	9.9	2.3	2.0
Coal, coke, briquettes	8.8	1.2	2.2	1.9	1.4	1.2	6.1		
Other	0	0	0	0	0	0	3.8		
Chemicals (SITC 5)	3.3	3.5	3.5	4.2	5.5	3.3	5.7	1.3	9.5
Plastic materials	.7	.5	.8	.3	1.0	1.7	2.5		
Perfume, cleaning products	1.1	1.1	.6	3.3	3.0	.8	.4		
Other	1.5	1.9	2.1	.6	1.5	.8	2.8		
Basic industrial goods (SITC 6)	113.3	145.7	102.9	78.7	86.8	149.1	262.7	60.1	15.0
Nonferrous metals	83.2	93.3	71.6	65.7	71.2	116.7	210.7		
Iron and steel	25.6	50.0	24.9	8.8	11.6	25.3	42.1		
Textile yarn and fabric	1.5	1.0	3.7	2.3	2.6	4.3	6.3		
Nonmetal mineral manufactures	2.4	.5	.9	.4	.3	1.5	1.6		
Other	.6	.9	1.8	1.5	1.1	1.3	2.0		
Machinery and transport equipment (SITC 7)	1.1	1.6	1.2	3.5	7.2	4.9	2.5	.6	14.7
Electrical machinery	.6	1.2	.6	2.7	6.3	4.1	1.0		
Nonelectric machinery	.5	.4	.6	.7	.2	.8	1.4		
Transport equipment	0	0	0	.1	.7	0	.1		
Miscellaneous manufactures (SITC 8)	2.5	2.1	3.7	3.9	3.7	7.6	4.4	1.0	9.9
Miscellaneous manufactures	.8	.7	.8	1.3	2.2	3.1	1.5		
Art and antiques	(0)	(0)	(0)	(.5)	(.9)	(1.1)	(.3)		
Jewelry	(0)	(.1)	(0)	(0)	(0)	(.7)	(.1)		
Clothing	.8	1.0	1.8	1.7	.9	2.5	1.8		
Instruments, watches, clocks	.4	.3	.1	.5	.2	1.1	.6		
Other	.5	.1	1.0	.4	.4	.9	.5		
Other	2.2	.3	1.2	.7	.7	.2	.6	.1	−19.5

[1] Negligible.

Source: U.N. trade data, magnetic tapes.

TABLE A-10.—LEADING DPRK EXPORTS TO 31 WESTERN COUNTRIES

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
68	Nonferrous metals	1	$116,654	37.0		$71,246	28.1		$65,738	30.0	
03	Fish and fish preparations	2	43,371	14.0		23,590	9.3		9,194	5.4	
27	Crude fertilizers and minerals	3	27,518	8.9		10,605	6.6		16,961	10.0	
67	Iron and steel	4	25,330	0.2		11,577	4.6		8,758	5.2	
04	Cereals and cereal preparations	5	14,778	4.0	73.7	56,756	22.4	71.0	19,282	11.4	70.8
28	Metalliferous ores and metal scrap	6	13,946	4.5		3,990	1.6		4,921	2.9	
29	Crude animal and vegetable materials, n.e.s.	7	10,097	3.3		7,915	3.1		7,209	4.3	
26	Textile fibers and their waste	8	10,049	3.3		17,011	6.7		8,342	4.9	
05	Fruit and vegetables	9	9,746	3.2		10,370	4.1		2,387	1.4	
21	Hides, skins, and fur skins, undressed	10	5,394	1.7	89.6	4,461	1.8	88.3	3,893	2.0	86.6
	Top 50 total		308,885			252,248			169,285		
	Total exports to I.W		308,902			253,156			169,295		
	Top 50 as percent of total exports to I.W		100.0			99.6			100.0		
	5-DIGIT SITC AGGREGATES										
6851	Lead alloys, unwrought	1	$44,518	14.4		$29,565	11.7		$20,435	12.1	
6861	Zinc alloys, unwrought	2	37,535	12.2		26,934	10.6		37,202	22.0	
68111	Silver, unworked, worked not rolled	3	34,096	11.0		14,678	5.0		7,266	4.3	
0312	Fish, salted, dried, or smoked	4	20,375	6.6		6,428	2.5		1,596	.9	
27624	Magnesite	5	18,793	6.1	50.3	10,079	4.0	34.8	12,713	7.5	46.8
0422	Rice, glazed or polished	6	14,737	4.8		38,713	15.3		15,530	9.2	
0313	Crustacea and mollusks, fresh, chilled, etc	7	13,227	4.3		10,005	4.0		5,799	3.4	
2835	Ores and concentrates of zinc	8	12,410	4.8		2,915	1.2		3,896	2.3	
05462	Vegetables in temporary preservative	9	8,888	2.9		8,442	3.3		1,912	1.1	
0311	Fish, fresh, chilled, or frozen	10	8,315	2.7	68.9	5,036	2.3	60.7	1,271	.8	63.6
2924	Plants, seeds, flowers, and parts of plants	11	7,885	2.6		6,920	2.7		6,477	3.8	
6712	Pig iron, includes cast iron	12	7,866	2.5		7,770	3.1		6,856	4.0	
67411	Iron, simple steel, heavy plate	13	7,152	2.3		1,624	.6		0	0	
67251	Iron, simple steel, blooms, etc	14	4,658	1.5		541	.2		940	.6	
2120	Fur skins, undressed	15	4,558	1.5	78.3	2,712	1.1	68.4	3,052	1.8	73.8
2611	Silkworm cocoons, suitable for reeling	16	3,683	1.2		11,383	4.5		4,097	2.4	
27695	Natural steatite, talc	17	3,647	1.2		3,188	1.3		2,112	1.2	
3214	Coal (anthracite, bituminous)	18	3,178	1.0		1,413	.6		1,866	1.1	
2613	Raw silk (not thrown)	19	2,947	1.0		2,412	1.0		1,783	1.1	
0250	Eggs	20	2,639	.9	84.5	1,435	.6	76.2	1,654	1.0	80.6
7241	Television receivers	21	2,298	.7		2,353	.9		757	.4	
2612	Unreelable cocoons and cocoon wastes	22	2,227	.7		2,564	1.0		1,244	.7	
67431	Iron, simple steel, thin, uncoated	23	2,121	.7		1,039	.4		440	.3	
27622	Natural graphite	24	2,087	.7		1,133	.4		911	.5	
67271	Iron, simple steel coils	25	1,941	.6	88.0	221	.1	79.1	0	0	82.6
	Top 50 total		294,481			213,721			149,400		
	Total exports to IW		308,902			253,156			169,295		
	Top 50 as percent of total exports to IW		95.3			84.4			88.2		

TABLE A-11.—IMPORT TRADE SHARES OF 31 WESTERN COUNTRIES FROM THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA, 1974–80

[Dollar amounts in thousands of dollars]

	1974		1975		1976		1977		1978		1979		1980	
	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)
IW, total	$262, 760	100.0	$308, 895	100.0	$180, 147	100.0	$169, 295	100.0	$253, 156	100.0	$308, 902	100.0	$436, 761	100.0
Belgium-Luxembourg	7, 154	2.7	1, 553	.5	3, 128	1.7	3, 342	2.0	249	.1	3, 722	1.2	258	.1
Denmark	356	.1	54	0	204	.1	158	.1	78	0	118	0	241	.1
Federal Republic of Germany	22, 024	8.7	51, 250	16.6	31, 362	17.4	22, 252	13.1	26, 456	10.5	31, 373	10.2	78, 867	18.1
France	12, 584	4.8	18, 886	6.1	8, 700	4.8	9, 105	5.4	4, 370	1.7	28, 684	9.3	18, 834	4.3
Ireland	187	.1	1, 168	.4	530	.3	218	.1	65	0	197	.1	195	0
Italy	4, 222	1.6	2, 412	.8	1, 199	.7	1, 709	1.0	18, 744	7.4	8, 720	2.8	14, 808	3.4
The Netherlands	3, 524	1.3	4, 760	1.5	5, 245	2.9	1, 678	1.0	1, 473	.6	860	.3	193	0
United Kingdom	4, 676	1.8	0	0	2, 526	1.4	5, 692	3.4	2, 867	1.1	2, 044	.7	908	.2
European Community, subtotal	55, 527	----------	80, 083	----------	52, 894	----------	44, 164	----------	54, 302	----------	75, 718	----------	114, 304	----------
Australia	393	.1	53	0	101	.1	402	.3	64	0	280	.1	170	0
Austria	903	.3	930	.3	662	.4	371	.2	2, 393	.9	1, 233	.4	593	.1
Brazil	0	0	94	0	0	0	0	0	3	0	0	0	434	.1
Canada	92	0	106	0	1, 983	1.1	496	.3	361	.1	377	.1	144	0
Egypt	1, 087	.4	27, 215	8.8	4, 720	2.6	4, 375	2.6	3, 256	1.3	989	.3	51	0
Finland	3, 264	1.2	540	.2	547	.3	152	.1	347	.1	193	.1	8, 530	2.0
Guadeloupe	0	0	0	0	6	0	8	0	16	0	40	0	28, 944	6.6
Greece	14	0	31	0	73	0	113	.1	38	0	383	.1	6	0
Hong Kong	6, 607	2.5	6, 936	2.2	14, 860	8.2	17, 018	10.1	17, 775	7.0	21, 153	6.8	37, 051	8.5
Iceland	0	0	0	0	1	0	2	0	5	0	1	0	179, 091	41.0
Indonesia	54, 697	20.8	100, 542	32.5	3, 242	1.8	18, 708	11.1	45, 923	18.1	21, 599	7.0	29	0
Japan	108, 877	41.4	64, 959	21.0	71, 627	39.8	66, 618	39.4	105, 783	41.8	150, 931	48.9	17	0
Martinique	7	0	10	0	5	0	1	0	19	0	48	0	78	0
New Zealand	2	0	119	0	32	0	0	0	0	0	2	0	276	.1
Norway	314	.1	1, 295	.4	345	.2	405	.2	80	0	1, 105	.4	275	.1
Pakistan	6, 143	2.3	2, 579	.8	2, 236	1.2	743	.4	2, 114	.8	147	0	9, 418	2.2
Portugal	1, 261	.5	192	.1	48	0	510	.3	10	0	23	0	1, 459	.3
Singapore	7, 432	2.8	11, 799	3.8	11, 923	6.6	7, 531	4.4	6, 869	2.7	8, 698	2.8	1, 387	.3
Spain	363	.1	1, 076	.3	490	.3	529	.3	661	.3	1, 040	.3	48, 651	11.1
Sweden	248	.1	581	.2	1, 426	.8	1, 578	.9	1, 267	.5	816	.3	153	0
Switzerland	263	.1	474	.2	312	.2	751	.4	1, 259	.5	15, 722	5.1	5, 700	1.3
United States	22	0	45	0	2	0	94	.1	26	0	121	0	----------	----------
Yugoslavia	15, 244	5.8	9, 236	3.0	12, 612	7.0	4, 666	2.6	10, 585	4.2	8, 275	2.7	----------	----------

Source: U.N. trade data, magnetic tapes.

TABLE A-12.—PROJECTED 1985 DPRK TRADE WITH THE WEST

[Dollar amount in millions]

	1980		Projected 1985		Projected average annual growth rate, 1980-85 (percent)
	Amount	Percent of total	Amount	Percent of total	
Imports from IW	$543.3	100.0	$1,238.0	100.0	18.
Foodstuffs (SITC 0, 1, 4)	47.7	8.8	68.5	5.5	7.5
Crude materials (SITC 2)	29.0	5.3	72.2	5.8	20.0
Mineral fuels (SITC 3)	22.7	4.2	169.3	5.6	25.0
Chemicals (SITC 5)	66.1	12.2	133.0	10.7	15.0
Basic industrial goods (SITC 6)	135.8	25.0	337.9	27.3	20.0
Machinery and transport equipment (SITC 7)	207.0	38.1	515.1	41.6	20.0
Miscellaneous manufactured goods (SITC 8)	23.2	4.3	26.9	2.2	3.0
Other (SITC 9)	11.8	2.2	15.1	1.2	5.0
Exports to IW	436.8	100.0	1,074.2	100.0	20.0
Foodstuffs (SITC 0, 1, 4)	73.2	16.8	93.4	8.7	5.0
Crude materials (SITC 2)	77.8	17.8	214.6	20.9	22.5
Mineral fuels (SITC 3)	9.9	2.3	19.9	1.9	15.0
Chemicals (SITC 5)	5.7	1.3	8.2	.8	7.5
Basic industrial goods (SITC 6)	262.7	60.1	724.7	67.5	22.5
Machinery and transport equipment (SITC 7)	2.5	.6	5.7	.5	18.0
Miscellaneous manufactured goods (SITC 8)	4.4	1.0	7.1	.7	10.0
Other (SITC 9)	.6	.1	.6	.1	0
Trade turnover	980.1		2,970.6		
Balance	−106.5		−163.8		

POLAND: PERFORMANCE AND PROSPECTS IN TRADE WITH THE UNITED STATES AND THE WEST*

By Gary R. Teske

CONTENTS

Page

I. Summary 203

II. Poland's Objectives and Performance in Trade with the West 205
  - A. Poland's Trade Objectives with the West 205
  - B. Poland's Trade Performance with the West, 1971–81 207
    - 1. Poland's Trade in Perspective 207
    - 2. The Growing Trade Gap: 1972–75 207
    - 3. Mounting Trade Problems and Revised Plans, 1976–79 208
    - 4. 1980–81 Developments 208
    - 5. United States Trade with Poland 209
    - 6. Analysis of Poland's Foreign Trade Problems 210
      - a. Factors Beyond Warsaw's Control 210
      - b. Government Policy Miscalculations 211
      - c. Supply Constraints 212
      - d. Planning and Management Limitations 213

III. Poland's Hard Currency Debt 213

IV. Poland's Hard Currency Trade Objectives and Strategy: 1981–85 214
  - A. Objectives and Constraining Factors 214
  - B. Import Needs from the Industrialized West, 1981–85 215

V. Poland's Hard Currency Export Capabilities 218
  - A. Composition of Recent Exports to the Industrialized West 218
  - B. Future Prospects 219

VI. Poland's Hard Currency Trade and Debt Outlook 223

VII. U.S.-Polish Trade Potential, 1981–85 224
  - A. U.S. Exports to Poland 224
  - B. U.S. Imports from Poland 224

Appendix 226

I. SUMMARY

Poland's current economic problems stem from a development strategy launched in 1971 which simultaneously pursued rapid expansion in capital investment and consumption. The Gierek regime—which came to power in December 1970 after serious worker riots over food price hikes—believed that high rates of investment were needed to build up Poland's economic infrastructure, modernize existing production facilities, and develop a viable export sector. At the same time, significant increases were planned for the growth of personal incomes and consumer goods production to provide added incentives for projected increases in labor productivity.

To help modernize industry, Poland imported large amounts of Western goods and equipment, paid for largely by borrowings from Western governments and commercial banks. The expectation was that Polish exports, produced in new or modernized plants utilizing the most modern Western machinery and technology, would expand rapidly and permit repayment of the debt.

---

*At the time of writing, detailed data used in this assessment were available only through 1979. Wherever possible, more current data have been incorporated and trends reviewed in light of the additional information.

Initially, this strategy yielded impressive results. Imports from the West, paced by soaring purchases of manufactured goods, grew fivefold between 1971 and 1975. Poland's exports to the West also rose rapidly, increasing an average of 27 percent per year in 1971–75. Over the same period, Poland's national income increased briskly, accompanied by substantial increases in personal incomes and the standard of living.

Toward the mid and latter-1970's, however, it became clear that this strategy had misfired. Through mismanagement and bottlenecks in construction and supplies, start-up of newly purchased equipment and installations lagged way behind schedule which reduced the availability of products for export. Poland's export performance was further hindered by a Western recession which slackened demand for traditional export products. On top of this, Poland was required to make large hard currency imports of agricultural products, especially feed grains, to alleviate consumer unrest over meat shortages. Such shortages stemmed from harvest shortfalls and excessive consumer demand caused by artificially low meat prices and above-plan increases in consumer incomes.

Before the imposition of martial law, Poland was seeking to extricate itself from its economic predicament with a combination of government and private debt reschedulings and economic reform. Debt reschedulings were needed to ease Poland's payments crunch while reforms were viewed as the best path to economic recovery. However, economic reforms and stabilization plans never got off the ground before martial law was imposed.

Since the imposition of martial law, Poland's economic problems have not vanished. In fact, they may have been further compounded. Whereas in late 1981 there was some hope for labor peace and a return to "normal" levels of production, the imposition of martial law and suppression of Solidarity has complicated future labor relations. Martial law has not solved the regime's labor problems; it has only postponed the day when the government again will have to confront them.

Given Poland's domestic economic and foreign trade situations, as well as the uncertainties generated by current debt rescheduling negotiations, projection of Poland's overall hard currency trade by year-end 1985 is not easily made at this time. In addition, the sanctions imposed by the United States have increased uncertainties of Poland's trade with the West. Poland's hard currency imports during 1981–1985 will be highly dependent on two variables: its export earnings and the amount of Western credit financing received during the period. At this time, it is difficult to predict the levels of those variables.

Until the situation in Poland stabilizes and industrial bottlenecks are cleared up, it is impossible to forecast 1981–85 production and the rate of export growth. Imports in the near term are expected to be limited to agricultural commodities, agricultural chemicals and equipment, and industrial spare parts. In the long term, if Poland is to continue to develop its major extractive industries (coal, copper and sulfur), markets likely will exist for mineral extraction, and materails handling and processing equipment.

Obtaining financing for hard currency imports will be Poland's major difficulty in the next few years. What Warsaw will be able to obtain from Western governments and commercial banks remains uncertain. Since the imposition of martial law, however, Poland's financial situation has become even more uncertain. The negotiations to reschedule Poland's 1981 repayments to Western commercial banks have just been completed. Difficult negotiations to reschedule 1982 debts are expected to begin in the near future. In addition, because of the imposition of martial law, Western Governments are expected to be less forthcoming with official assistance in 1982 and beyond. As a result, Warsaw will be hard pressed to maintain essential imports from the West in its efforts to stimulate economic recovery.

While Poland's policy during the 1970s of heavy industrial investment financed by hard currency borrowings has left it with massive foreign debts, it has also left it with a basis to rebuild its shattered economy. The industrial capacity of the country, now partly idled by lack of spare parts and raw materials, remains sizable. If present cash flow problems can be solved, the economy reformed, and labor peace reestablished, Poland has a chance to get its economy back on track. But, at this time, the outlook for the achievement of these prerequisites is bleak.

II. POLAND'S OBJECTIVES AND PERFORMANCE IN TRADE DURING 1971–81

A. POLAND'S TRADE OBJECTIVES WITH THE WEST

To analyze Poland's objectives in its trade with the West during 1971–81, Warsaw's overall development strategy during that period must be examined. Since the early 1970s, Poland's Government has tried to adhere to a development startegy that placed emphasis on modernizing Poland's economy and boosting living standards, especially for urban workers. The Government believes that a "new" approach was imperative—Poland's economic growth was steadily falling behind that of the less developed East European countries which had begun modernization programs in the 1960s. The ensuing development strategy involved switching from an "intensive" pattern of development to an "extensive" pattern in which emphasis was placed on increasing output through increased capital and labor productivity, rather than through increased inputs of capital and labor. Such a shift was necessary because of a slowdown in the growth of labor migration from agriculture to industry, together with a precipitous drop in the growth of the labor participation ratio for women. In addition, the emphasis on heavy industry at the expense of consumer goods production during the Gomulka era of the late 1950s and 1960s resulted in serious shortages of consumer goods and a concomitant rise in consumer unrest.

In order to achieve the new policy, the Gierek regime—which came to power in late 1970 as a result of worker strikes and consumer violence over price hikes—realized that it had to maintain high rates of investment to build up Poland's neglected economic infrastructure, modernize existing production facilities, and develop a viable export sector. At the same time, in order to achieve the projected increases in labor productivity, the strategy assumed that workers had to be given added incentives to spur the growth of their output. To this end, significant increases were planned for the growth of personal incomes as well as in the quantity and quality of consumer goods. Finally, to ensure the effectiveness of each of the above policies, changes in the system of management and planning were to be implemented.

To help modernize industry, restructure the economy, and improve worker productivity, the Poles believed that it was necessary to import large amounts of Western capital, technology, and consumer goods.[1] To pay for these imports, the Poles realized that current hard currency earnings and reserves were insufficient and, therefore, significant long-term borrowings would have to be sought from Western creditors. Although the Poles expected these credits to sharply increase their hard currency debt, they believed repayment could be made with expanded exports of goods produced in the newly constructed plants. For that reason, the latest and most advanced technology was acquired. It was implicitly assumed by Polish planners that the output produced with the help of Western imports would be easily salable in Western markets.

As previously noted, an important element in Poland's development strategy was to develop a viable export sector—especially with respect to the markets of the Industrialized Western economies. To this end, Polish economists and planners believed it was necessary to diversify Poland's export structure through the development of new export industries. Development of such industries was to be broad and to parallel closely existing and expected demands in Western export markets. Consequently, Poland decided to invest heavily to develop and/or expand the following industries:

Heavy machinery; chemicals (especially PVC, fertilizers, pharmaceuticals, and synthetic fibers); aircraft and aircraft components; construction equipment (especially bulldozers, each dumpers, and pipelaying tractors); automobiles, trucks and tractors (including components); household appliances; shipbuilding; and electronics.

The payoff in exports from these projects generally was not expected until the early part of the 1976–80 plan period. In some instances, however, the payoff was not anticipated until much later. For example, a 1972 agreement with the Austrians did not provide for the Polish export of trucks, at the earliest, until 1980.

At the same time, planners envisaged that traditional export industries (such as those producing coal, copper, meat and meat products, clothing, and textiles) would continue to grow, with increasing quantities available for export to the Industrialized West. In general, these industries were planned to receive additional investments in 1971–80. Imported Western capital equipment earmarked for the future development of these industries, however, was small compared to imports in other industries. Planners believed that investments of domestically produced/CMEA equipment would be sufficient to allow these industries to grow at a rapid rate. It also was assumed that the Western economies would absorb the increased exports of these goods.

---

[1] As noted later, the bulk of consumer goods imports was mainly grains and feeds to support the growth of livestock inventories. Imports of Western manufactured consumer goods never were large and served mainly as a device—through the PEWEX stores—to siphon-off some of the population's large hard currency holdings. Nevertheless, such imports, albeit small, gave the appearance of "improved" living standards.

The final element in the foreign trade segment of the development plan called for the expansion of import substitution industries such as steel, cement, pulp and paper, and copper and copper manufactures. Such an effort was deemed necessary to reduce substantial hard currency outlays on these items—items that were essential for the growth of a viable export sector.

The Gierek regime held steadfast to its foreign trade plan until late 1976, the first year of the new five-year plan. During that year, workers' riots took place in protest against proposed increases in the prices of basic foodstuffs. As a result, the Government was forced to adopt the so-called "new economic maneuvre"—a policy involving a switching of resources to export expansion as well as to curbing import growth. Priority was also given to agriculture, production of consumption goods for the domestic market, and housing construction. These priorities were to be achieved by a reduction of investment in other sectors, improved efficiency of investment, and elimination of waste. At the same time, in order to strengthen the new policy, measures were taken to insure greater production for export and for domestic consumption. The "new economic maneuvre" policies lasted until 1980 when Poland realized that policies once again would have to be readjusted to meet its pressing economic problems of the 1980s as well as to meet the demands of the Solidarity trade union movement.

B. POLAND'S TRADE PERFORMANCE WITH THE WEST DURING 1971–81

1. Poland's Trade in Perspective

Before the Gierek regime took power in late 1970, Poland's trade was heavily oriented toward the CMEA countries. In 1970, almost two-thirds of Poland's total trade was with its communist country partners, while only one-fourth of its trade was with the Industrialized Western countries (see Table A–1). By 1974, however, the direction of Poland's trade had changed markedly because of Gierek's development strategy—only 46 percent of total trade was conducted with communist countries, while the developed country share had climbed to 45 percent. Due to the slowdown in the growth of Polish imports from the West in the late 1970s as well as higher CMEA energy prices, Poland's trade orientation by 1979 had swung back in favor of the CMEA countries. In 1981, 62 percent of Poland's total trade was with CMEA, while the Industrialized Western share had dropped to less than one-third. One interesting trend over the period—reflecting, in part, Poland's trade problems—was that the share of Poland's exports going to the West has remained fairly stable at 28–30 percent between 1970 and 1981.

2. The Growing Trade Gap: 1972–75

As a result of this development strategy, Poland's trade surpluses of the 1960s and early 1970s turned to deficits by 1972 (see Table A–2). Imports, paced by soaring purchases of Western manufactured goods, grew to $5 billion by 1975—more than six times the 1971 level. Manufactured goods imports (SITC 7 and 8) rose from $261 million in 1971 to exceed $2.5 billion by 1975. Rapid increases in domestic demand, rising world prices, and some reductions in Soviet deliveries also led to sharp increases in imports of basic manufactured goods (mainly, iron and steel). Increased purchases of high priced Western grains and feedstuffs (SITC 0)—needed to expand livestock production—also contributed to the sharp rise in imports.

Poland's exports to the Industrialized West also rose rapidly in 1971–75—at an annual average rate of 26.7 percent—because of increased exports of coal, chemicals, foodstuffs, and light industrial products. However, more than 40 percent of the rise in export value represented higher export prices, rather than a significant expansion in volume. As a result of the faster growth in imports over the period, Poland ran a cumulative trade deficit of over $5 billion with the West.

3. *Mounting Trade Problems and Revised Plans, 1976–79*

By 1976 Poland had to alter its economic plans in order to cope with its growing domestic and foreign trade problems. The leadership's reaction to the mounting trade problems in 1976 was to try to put a brake on the high level of imports from the Industrialized West and boost exports. Cutbacks were made in purchases of iron and steel, crude materials and machinery and equipment. The latter categories were difficult to curb, however, because Poland was still receiving Western equipment and machinery on orders placed during its 1972–75 buying binge. These cutbacks, however, were somewhat offset by large purchases of Western grain and feedstuffs that were needed to keep a lid on consumer dissatisfaction over food shortages as well as to boost feed supplies that were required to maintain livestock production. Warsaw had some success in reducing imports in 1977 but disastrous harvests during 1977–78 forced higher grain import levels in 1978 and 1979. Nevertheless, for the period as a whole, Warsaw was able to restrain import growth to a 3.5 percent average annual rate.

Poland had relatively good results in boosting exports in 1976–79, but the results were not good enough to close the existing large trade gap. Exports grew at a 10.2 percent average annual rate on the strength of surges in exports of manufactured goods. Because of the good export performance. Poland was able to reduce its hard currency trade deficit from $2.8 billion in 1976 to $1.3 billion in 1979.

4. *1980–81 Developments*

Despite the major disruptions to the economy created by labor strife and emergence of the Solidarity trade union, Poland was able to pare its trade deficit to $900 million in 1980. Imports held steady at 1979 levels while exports grew to $7.5 billion. The labor turmoil, however, did have an impact on exports. It is estimated that Poland lost over $400 million in export earnings during the second half of 1980 because of the labor strife and ensuing reduction of the work week in the mines. Decreased exports of copper, cement, and sugar also affected hard currency earnings. Despite the improved trade balance, burgeoning interest payments on the debt resulted in a nearly $3 billion current account deficit in 1980.

Poland's economy continued to founder in 1981. Industrial output and national income dropped by 13 percent to a position comparable to 1974 levels. This decline can be attributed to past errors in development policies, reduction in the work week (especially in the mining sector), social unrest, and strike actions. In addition, difficulties in obtaining fuels, raw materials, and other industrial inputs led to some idle production capacity. These negative economic developments impacted sharply on Poland's trade with the West in 1981. Exports to the West dropped 20 percent while imports fell by 30 percent. Although this caused the trade deficit to decrease to roughly $500 million, burgeoning interest payments on the debt resulted in a $3 billion current account deficit. The quantity of exports and imports dropped in all categories except foodstuffs. Most noteworthy, however, was the steep drop in coal exports which fell from 31 million tons in 1980 to 15.2 million tons in 1981.

5. United States Trade With Poland

Since 1974, the U.S. has registered a substantial trade surplus with Poland each year (see Table A–3). In 1981, this surplus amounted to $315 million—an amount greater than the 1980 level of $294 million but less than the $360 million record achieved in 1979. Much of the growth in U.S. exports to Poland has been paced by brisk sales of grains and other agricultural commodities. Poland's continuing economic problems, however, caused a drop in U.S.-Polish trade in 1980 and 1981 from the record level achieved in 1979.

As a result of the imposition of martial law, the U.S. imposed the following economic sanctions on Poland on December 23, 1981:

Suspension of Polish civil aviation privileges in the United States;

A halt in the renewal of the Export-Import Bank's line of credit insurance to the Polish Government;

Suspension of the right of Poland's fishing fleet to operate in American waters; and

Proposals to our Allies for the further restriction of high-technology exports to Poland.

Under the sanctions,

1. LOT, the Polish airline, will no longer have landing privileges in the United States for its regular or chartered flights. A bilateral agreement governing civil aviation in the two countries will be allowed to expire on March 31, 1982. No U.S. airline currently services Poland.

2. The U.S. Export-Import Bank will not renew a $25 million line of credit insurance to support short-term (180 day) loans to Poland for suppliers and banks to pay for imports from the United States. Without such insurance, private lending to Poland to finance imports is unlikely because of Poland's financial condition. The line of credit expires November 30, 1981.

3. Poland will not be granted a portion of surplus U.S. fishery resources in the 200-mile fishing conservation zone in 1982. Poland's allocation for 1981 was 231,326 metrics tons. The U.S. decision will have a substantial impact on Poland's overall fisheries, namely, a decline in the availability of fish in Poland and a hard-currency loss to the Polish Government from lost sales to traditional purchasers, among them, the United States.

4. The U.S. will discuss with the Allies and Japan tightening the way controls are applied to the export to Poland of advanced technology with strategic implications.

6. Analysis of Poland's Foreign Trade Problems

The obvious and simple reason for Poland's problems in its trade with the Industrialized West in the 1970s is that Polish imports grew faster than exports. But, this explanation begs further questions:

Why did Polish officials allow imports to grow so much faster than exports, especially when it became apparent that original export plans would not be achieved?

What factors inhibited Poland from achieving a high growth rate in exports to the Industrialized West? Were these factors beyond the control of the Government? Were these conditions inherent in Poland's economy that worked against a rapid expansion and diversification of exports?

Were supply constraints responsible for the inability to achieve export targets?

Answers to these questions indicate that the reasons for Poland's hard currency trade problems may be classified in one or more of the following categories:

Factors beyond Warsaw's control; policy mistakes made by Polish officials; supply constraints; and factors inherent in Poland's planning and management system.

a. Factors Beyond Warsaw's Control

The Western recession, beginning in late 1974, and its sluggish recovery sharply affected Poland's ability to increase its exports to the Industrialized Western countries. A main goal of Poland's development plan was to boost traditional exports and develop new markets in the Industrialized West for Polish exports of manufactured goods. However, the recession and its aftermath, not envisaged by Polish planners, made it very difficult for Poland to maintain its Western market share in traditional exports (e.g., coal), let alone open up new market opportunities in areas in which Poland previously had not competed (e.g., copper and manufactured goods).

In addition to the recession and sluggish world trade growth in the late 1970's, Western tariff and non-tariff barriers have restricted the expansion of Polish exports to the Industrialized West. Industrialized Western trade barriers—European Community barriers, in particular—have been placed on Polish exports of clothing, textiles and yarn, chemicals, footwear, and some heavy-duty machinery. However, in the cases of clothing, textiles, and footwear, Poland still has been able to penetrate Industrialized Western markets. Nevertheless, exports of these items have been substantially less than those envisioned by Polish planners. These plans, in many instances, probably were unrealistic at their inception, given the prevailing conditions in Industrialized Western markets for these commodities.

Poland also has had to face stiff competition for Western markets from newly developed industries in other East European countries and from members of the Organization of Petroleum Exporting Countries (OPEC). For example, this competition especially has been keen in trying to penetrate Industrialized Western markets for petrochemicals. During the 1972–75 period, Poland imported massive amounts of plant and equipment to build-up its petrochemical industry. With the surges in world oil prices since 1973, Polish planners scaled-down plans for the development of this industry. Nevertheless, with massive investments for the production of PVC, synthetic fibers, and plastics already made, Polish trade officials have tried to boost chemical exports to the Industrialized Western countries. Given the overcapacity of the chemical industries in the Industrialized West during the late 1970's and stiff competition from other East European and OPEC countries (which generally also decided to develop their petrochemical industries in the early 1970's), Poland has had little success in boosting the share of chemical exports in total exports to the Industrialized West.

Finally, Poland's agricultural difficulties have caused serious problems for both exports and imports. It should be emphasized that Poland's agricultural problems do not stem entirely from weather induced poor harvests. On the contrary, some would argue that Poland's problems stem primarily from Government agricultural and pricing policies. Nevertheless, poor weather has been a factor that has caused some of Poland's trade problems in agricultural products. As a result, Poland has had to curb meat exports, boost grain imports to record levels, and, in some years, import significant quantities of meat—all of which have had a damaging impact on Poland's ability to control its chronic trade deficits with the Industrialized West.

b. Government Policy Miscalculations

The Government compounded its trade problems with key policy decisions. With the onset of the Western recession, most Eastern European countries cut back on plans for imports from the Industrialized West, and, in some cases, on economic growth plans. But, the Polish Government, driven by the desire for rapid industrialization and the belief that domestic political stability was linked to further improvements in living standards, continued to push its ambitious development program. As a result, Polish imports of Western equipment and grain continued to surge. It was not until late 1976, in the face of mounting domestic economic and trade problems, that officials began trying to curb imports from the Industrialized West.

Government income, pricing, and agricultural policies also contributed to Poland's adverse trade problems. A rapid growth in workers incomes and stable consumer prices have been key elements in the Government's attempts to boost labor productivity. Government policies designed to boost meat consumption—at prices frozen at unrealistically low 1967 levels—have been disastrous. The rapid growth in incomes during the 1970's, along with a slower growth in supplies of attractive consumer goods and housing, have led to an excessive demand for meat and meat products. This excessive demand, largely since 1974, has resulted in chronic shortages of meat, accompanied by occasional outbreaks of consumer unrest.

In order to ensure "sufficient" meat supplies, the Government (as previously noted) has had to curb meat exports and boost grain imports. Policy changes that included a slow-down in wage growth along with gradual increases in meat and other food prices probably could have lessened the impact of Poland's agricultural problems on trade with the Industrialized West. Specifically, if the Government had altered its pricing and income policies, it probably could have avoided the sharp cuts in meat exports as well as lowered its grain import requirements—all of which would have contributed to more manageable trade deficits with the Industrialized West.

Some Polish economists now question the underlying assumptions about Poland's original policy to diversify its export structure—at the expense of traditional exports—in order to build a more viable export sector. Most would agree, however, that Poland's export structure needed to be diversified, especially by increasing the share of manufactured exports to the Industrialized West. At the beginning of the development plan, Poland's export structure—biased heavily toward the export of primary products—was characteristic of an economy at a lesser stage of industrial development.

The problems with Poland's attempts to diversify exports are that planners have allowed too many projects to be undertaken and have not ensured that export diversification has been logically planned, especially in light of Poland's poor infrastructure development. Rather than concentrating on a few "new" export industries, planners apparently adopted a "shot-gun" view—the more, the better. As a result, many new export industries are foundering and have not been able to generate the expected exports to the Industrialized West.

At the same time, it may be pointed out that because of the diversification attempts, Poland has created an industrial structure that, while not generating large exports to the Industrialized West, remains dependent on increased inputs of Western materials. An example of this situation can be seen in the development and performance of Poland's automobile industry. The expansion and modernization of the industry is based wholly on West European equipment, technology, and licenses. Despite its start in the early 1970's, the industry continues to run deficits in its trade with the Industrialized West. Exports of passenger cars have leveled off at about 21,000 units despite 30 percent annual increases in production. At the same time, imports of auto parts are now about five times those of automobile exports.

Finally, Polish planners apparently lost sight of the need to make significant new investments in the infrastructure—investments that are essential if Poland is to have a viable industrial and export structure. As the Polish economy rapidly grew in the early and mid-1970s, increasing strains were placed on Poland's outdated internal transport system and electrical power generating facilities. This neglect has resulted in serious bottlenecks, especially in the transport of coal from southern Polish mines to northern seaports. Frequent electrical "brownouts" have caused the rationing of electricity for industrial (and residential) use, which has resulted in lower industrial production, as well as creating more bottlenecks in the whole system of production. Significant, new investments finally are being undertaken in these areas, but considerable time will elapse before they can come on stream.

c. Supply Constraints

In some cases, Poland's problems in generating increased exports to the Industrialized West stem from insufficient quantities available for export. An explicit example is in the export of agricultural products. Poland probably could boost its exports of meat products (mainly canned hams) to the Industrialized West if only it could produce such items in sufficient quantities. Current agricultural problems, however, preclude such production. In addition, due to periodic domestic coal shortages, Poland has had to divert coal earmarked for export to the domestic market. One could make the generalization that for any product Poland produces for export to the Industrialized West, there probably exists substantial—and unsatisfied—demand for that product in the domestic market.

In addition to general constraints on supplies available for export, Poland also lacks adequate marketing, servicing, and advertising expertise. Polish enterprises also face serious problems in supplying replacement parts. Officials are trying to boost efforts in these support areas, but it will take Poland a long time to build such supportive industries. Meanwhile, lack of such support definitely hampers Poland's ability to boost its exports of manufactured machinery (e.g., automobiles, metal-working and glass-working machinery, and household appliances) which have unrealized market potential in the West.

d. Planning and Management Limitations

In addition to the above constraints on the ability to boost exports, flaws in Poland's management and planning system have worked against the development of a viable export sector. Top Polish officials concede that they have not been able to set up a consistent system of export incentives to entice domestic firms to produce for export markets. They point out that the existing system favors production for the domestic market because it is much easier for managers to attain plan goals (and bonuses) by producing for domestic consumers rather than trying to meet export goals that are much more difficult to achieve. The establishment in the mid-1970s of a hard currency reserve fund for firms that meet or exceed export targets to the Industrialized West has been an insufficient incentive for boosting exports, according to officials, because the Government—due to the need to service its large hard currency debt—has not allowed firms to utilize such funds.

In addition, it appears that the Government lost control over wages, investments, and imports in the last half of the 1970s because of ineffective central planning. As a result, enterprises operated contrary to planning directives, overinvestment occurred in many industries, and wage increases were far above plan. All of these factors essentially exacerbated Poland's balance-of-payments situation.

III. POLAND'S HARD CURRENCY DEBT

Poland's development strategy caused it to experience a rapid rise in its hard currency debt between 1971–75 (see Table A–4). During that period Poland ran a cumulative trade deficit with the Industrialized West totalling $5 billion, while its net outstanding debt increased from $764 million to about $7.4 billion by yearend 1975. Polish planners realized that the hard currency debt would grow but they also believed that inflation was a permanent fixture in the world economy and, therefore, the real value of the accumulated debt would decline in the long-run.

By 1976 Poland realized that its development strategy was foundering. Efforts to slash Western purchases and boost exports met with limited success. Poland continued to run sizable deficits on its hard currency trade with the Industrialized West. From 1976 to yearend 1979 Poland accumulated an additional $5.9 billion in trade deficits. The need to finance these deficits, as well as the need to finance burgeoning debt service payments, forced Poland to borrow further and, thus, incur higher debt levels. Total net hard currency obligations to Western creditors grew from $7.4 billion at yearend 1975 to $19.6 billion at yearend 1979. Most recent Western loans to Poland have carried maturities considerably shorter than the terms on credits extended during 1972–75, thereby greatly aggravating Poland's debt servicing payments. By yearend 1979, Poland's debt service ratio approached 100 percent. By far, this was the highest ratio for any of the CMEA countries.

Over three-fourths of the growth in Poland's debt during 1971–79 resulted from borrowings from Western commercial banks. Warsaw has been the largest East European used of syndicated credits, raising more than $2.5 billion from this type of borrowing. Official and officially backed credits make up nearly one-fourth of Poland's gross debt. Poland's $5.1 billion in official debt at yearend 1979 consisted of $4.4 billion in government-backed export credits, $0.6 billion in West German government-to-government credits, and $150 million in outstanding PL–480 obligations to the U.S.

During 1980, Poland's debt rose further to an estimated $24.5 billion. As a result of this crushing debt and resulting debt-servicing payments (estimated to be $10 billion in 1980 alone), Poland has been forced to negotiate with its major Western creditors on debt relief. In April of 1981 Poland was able to reach agreement with 15 major Western government creditors to reschedule 90 percent of Polish principal and interest payments ($2.5 billion) coming due through 1981. Similarly, Poland formally reached agreement with Western commercial banks in April 1982 on financial terms for rescheduling $2.4 billion in principal payments on unguaranteed debt due from April through December 1981. Poland is expected to begin negotiations in the near future to reschedule its debts falling due this year.

IV. POLAND'S HARD CURRENCY TRADE OBJECTIVES AND STRATEGY: 1981–85

A. OBJECTIVES AND CONSTRAINING FACTORS

Before the imposition of martial law, Poland was seeking to extricate itself from its economic predicament with a combination of government and private debt reschedulings and economic reform. While the details of an economic stabilization program were never fully elaborated before martial law was imposed, key features would likely have included.

Reduced industrial investment, with emphasis on completion rather than initiation of projects.

Reallocation of investments to those economic sectors that could generate quick hard currency export earnings.

Continued curtailment of all but essential hard currency imports.

Allocation of additional investments to agriculture, especially to the private sector (which accounts for three-fourths of total agricultural output).

Improvement of incentives and supplies for private farmers.

Institution of energy conservation measures.

Realignment of the pricing structure.

Both the Polish Government and Solidarity were in agreement on the need for economic reform to get the country out of its crisis before the imposition of martial law, but disagreed on how best to implement the reforms. The labor union realized the need for reduction of retail food price subsidization, but wanted price rises to be concurrent with a complete overhaul of the economy.

With the imposition of martial law, the status of economic reform is unclear. General Jaruzelski has come out in favor of reforms. In addition, the Polish Parliament is supposed to act this session on the reform bills pending before it. Nevertheless, questions linger as to the commitment of the regime to meaningful economic reforms that will put the economy on the road to recovery.

Poland's ability to deal with its economic situation is constrained by a number of factors. To achieve balance of payments equilibrium, Warsaw will have to curb further its Western imports and try to improve export performance. Cutbacks on its Western purchases, however, already have led to lower domestic production (including production earmarked for export). At the same time, efforts to increase exports may lead to further squeezes on domestic supplies. Moreover, continuing agricultural problems during 1981–85 will hamper Poland's ability to increase its foodstuffs exports. Finally, an attempt at reform will likely result in some damage to industrial production in the short-to-medium-term. Again, this could impact negatively on exports.

In addition to the above constraints, there is a great risk that Poland's worsening balance-of-payments situation has damaged Poland's ability to import from the West in 1981–85. This ability to import from the West is dependent on continuation of credit financing of its imports and a continued expansion of Poland's hard currency indebtedness. However, given that Poland has had to formly reschedule its debts for 1981. Warsaw's capacity to maintain credit flows to finance essential imports invariably will be sharply reduced. This situation will persist until some measure of creditor confidence is restored—a process that may take many months and even years.

The reduction in Western credits already has forced Warsaw to import most of its needed supplies on a cash-only basis. Thus, Poland's hard currency trade accounts basically will be forced into balance or surplus via sharp, painful cuts in purchases of vital goods. The resulting disruption of Poland's economy in the form of shortages of raw materials for industry could lead to a further slowdown in industry. In turn, such a development could lead to an intensification of the present domestic economic and political turmoil.

B. IMPORT NEEDS FROM THE INDUSTRIALIZED WEST, 1981–85

Tables A–5 through A–8 detail the composition of Poland's imports from the 17 major Industrialized Western (I.W.) countries for 1974–79. The percentage trade shares of each of these countries are listed in Table A–9. Imports from these countries accounted for 68.5 percent of total Polish hard currency imports in 1979.

Total imports from the Industrialized West grew at an average annual rate of 5.4 percent during 1974–79 (compared with a 12.2 percent annual growth in exports to these countries during the same period). In the case of Poland, the use of the 1974–79 time frame obscures the actual trend in Polish import growth because of the slowdown in growth—only 2.8 percent per annum—during 1976–79 (and the 9 percent absolute decline in imports in 1977 over 1976 levels). A more accurate description of Poland's Western buying binge is reflected by the 44.8 percent average annual growth in imports during 1972 (the initial year of Poland's modernization program) and 1976 (when Poland applied the brake on import growth).

Most of Poland's imports from the Industrialized West during the 1970's were comprised of foodstuffs and semi-finished and finished manufactures. In 1979, basic industrial goods (SITC 6) and machinery and transport equipment accounted for more than one-half (52.7 percent) of total Polish imports from the Industrialized West. Foodstuffs accounted for another 10.5 percent.

An examination of Poland's hard currency import needs by commodity category for the 1981–85 period follows:

Foodstuffs (SITC 0, 1, 4) have been the fastest growing import category since 1974, increasing at an average of 23.7 percent each year during 1974–79. As a result, the share of this category in Poland's total imports from the Industrialized West grew from 9 percent in 1974 to 20.5 percent in 1979. The growth of this item reflects Poland's poor agricultural performance during the period as well as government policies to cover agricultural shortfalls with costly imports. Major imports in this category have included wheat, corn, soybeans and soybean oilcake, and grain sorghums. A list of the top import items is given in Table A–7.

During 1981–85, Poland probably will need to continue its costly grain imports in order to maintain (and expand) livestock production for domestic consumption and for export. With annual grain requirements probably continuing to average roughly 27 million tons in the near term, Poland will need to import about 5 million tons or curtail its livestock expansion program. Agricultural imports, however, could decline towards the end of the 1981–85 period if Polish leaders vigorously pursue stated stabilization policies that (a) boost the flow of industrially produced materials and investment goods to private farms and (b) promote profitability in the private farm sector. In addition, more favorable weather in 1981–85 (as compared to weather conditions in 1976–80) should stimulate agricultural output. Even with improved availability of agricultural supplies and favorable weather, the Government must overcome the peasants' skepticism and persuade them to voluntarily invest more in their farms. In addition, the farm sector needs upgraded infrastructure that is costly to develop and would probably force the Government to reallocate industrial investment funds.

Crude Materials (SITC 2) accounted for 7.4 percent of Poland's imports from the Industrialized West in 1979, and consisted primarily of textile fibers, oil-seeds, pulp and waste paper, and crude fertilizers. Since most of these items are used in the consumer goods and building materials industries (and generally not in export-oriented industries), imports of these items will probably stagnate or even decline if Poland has to sharply curb its Western imports.

Mineral Fuels (SITC 3), consisting almost totally of lubricating oils, greases, and preparations, amounted to less than one percent of total imports from the Industrialized West in 1979. Since Poland satisfies much of its energy needs from its vast coal resources (and imports the bulk of its oil from the Soviet Union), imports of mineral fuels from the Industrialized West are likely to be maintained at 1976–80 levels.

Chemicals (SITC 5) represent Poland's second fastest growing import category in 1974–79, increasing at an 11.5 percent average annual rate. Imports consist mainly of chemical compounds, plastics, dyes, and pharmaceuticals.

In 1981–85, emphasis in the chemical industry will be placed on expanding production of pharmaceuticals, paints and varnishes, cosmetics, herbicides, plastics, and rubber products (tires, in particular). As a result, Poland will have to continue importing large quantities of chemicals to support the expansion of production in these areas. Dyes will continue to be a major import item, given the importance of clothing as a hard currency earner.

Basic Industrial Goods (SITC 6) accounted for 24.5 percent of Poland's imports from the Industrialized West in 1979 and consisted primarily of iron and steel, textile fibers and yarn, paper, and metal manufactures. Iron and steel imports alone accounted for 10.7 percent of Poland's total imports from the Industrialized West in 1979.

Slower economic growth during the 1981–85 period may dampen Poland's demand for imports of basic manufactures. The continued development of import substitution industries in this area also may lead to reduced demand. Finally, increased shipments of basic manufactures from CMEA countries also may allow Poland to reduce its Western purchases. Warsaw probably will try to continue to limit its iron and steel imports. Since reaching a peak of $855 million—16 percent of total imports from the Industrialized West—in 1975, Warsaw was able to reduce such imports in 1976–78. In 1979, however, iron and steel imports rose by 12 percent over 1978 levels. Despite this surge, Warsaw is expected to try to keep these imports down.

Past trends in the imports of textile fibers should continue as clothing/textiles are a large hard currency earner. In addition, as Poland expands its automobile industry (for domestic production and export), imports of crude rubber probably will increase.

Machinery and Transport Equipment (SITC 7) is the largest import category, accounting for 28.2 percent of total imports in 1979. The bulk of imports in this category is comprised of electrical and nonelectrical machinery. The share of machinery and transport equipment in total imports has fallen since 1975, when that share reached 40 percent. The drop is attributable to Poland's efforts to hold down imports from the West.

Future Polish trade plans, once announced, probably will call for a reduction in these imports in 1981–85. Indeed, Poland could substantially reduce its trade deficit by slashing its purchases of machinery not related to export production. Since emphasis is expected to be placed on the completion of investments rather than on undertaking new projects, Poland should be able to substantially reduce its purchases of Western machinery without having a major impact on economic performance during 1981–85.

Miscellaneous Manufactured Goods (SITC 8) accounted for only 2.9 percent of Polish imports from the Industrialized West in 1979. The major import items in this category are scientific measuring and controlling instruments and optical equipment. Instrumentation comprised about 42 percent of total miscellaneous manufactured goods imports. Given Poland's need to upgrade the quality of its manufactured goods exports, Poland is expected to continue to need such equipment during 1981–85.

Table A–8 indicates the origins of the five leading Polish imports from the Industrialized West. In four—nonelectrical machinery, iron and steel, chemical elements, and electrical machinery—of the five categories, the FRG is by far the leading supplier, representing around 30 percent of total Industrialized Western exports to Poland in those categories. The United Kingdom and France are also leading suppliers overall. Only in one category is the United States the major supplier with 46 percent of the market in 1979—cereals and cereal preparations. It is expected that the FRG, United Kingdom, France, and United States will maintain their roles as leading Industrialized Western exporters in these categories throughout 1981–85.

V. Poland's Hard Currency Export Capabilities, 1981–85

A. COMPOSITION OF RECENT EXPORTS TO THE INDUSTRIALIZED WEST

As indicated in Table A–10 Poland's exports to the Industrialized West increased at an average annual rate of 12.2 percent over the 1974–79 period. The bulk of Poland's exports—about three-fifths—to the Industrialized West went to the EC countries (see table A–12). In fact, the share of Poland's exports directed towards the EC rose from 65 percent in 1974 to 68.5 percent in 1979. The U.S. share fluctuated over the period, ranging from 8.2 to 11.8 percent of the total.

Tables A–10 and A–11 provide insights into Poland's export patterns during the 1974–79 period. The following observations can be made:

The share of primary products (SITC 0–4) in total exports fell sharply, dropping from 60.8 percent in 1974 to 52.1 percent in 1979. This reflects the sharp decline in exports of meat and other food products, as well as the stagnation in exports of coal. Nevertheless, coal (SITC 3214) remained the dominant export item over the period.

As the share of primary products has fallen, the share of manufactured exports (SITC 7–8) increased sharply, rising from 15.9 percent of the total in 1974 to 23.9 percent in 1979. At the same time, the share of exports of intermediate products (SITC 5–6) has increased slightly, rising from 22.3 percent of the total in 1974 to 22.8 percent in 1979. To some extent, this trend reflects Poland's development strategy to diversify exports, especially exports of manufactured goods.

The top five export items at the 5-digit SITC level still account for about one-third of total Polish exports to the Industrialized West. This indicates that Poland's exports have been concentrated in relatively few items. The top 25 items, likewise, roughly provide about three-fifths of Poland's earnings.

Since 1974, the composition of Poland's top five has changed slightly. The most noticeable difference is the sharp rise in exports of copper (SITC 68212), which have risen sharply as a result of Warsaw's efforts to tap its large copper deposits.

The composition of the top thirty exports also has been quite stable. Noticeable gainers between 1974 and 1979 were exports of basic iron and steel products (SITC 6740 and 67251), automobiles (SITC 7321), internal combustion engines (SITC 7115), gasoline (SITC 3321), and furniture (SITC 82109 and 82101). Significant losers—in relative terms—have been bacon (SITC 01221), and horse meat (SITC 0115). The latter losses reflect Poland's severe agricultural problems and the European Community's (EC) ban on imports of meat products and live animals from non-EC members.

B. FUTURE PROSPECTS

As previously noted. Poland has had some success in boosting exports to the Industrialized West, but greater success will be needed in 1981–85. The previous analysis highlighted the difficulties Poland faced in diversifying its exports, while increasing such traditional exports as coal, copper, and foodstuffs. The following will examine Poland's export capabilities during the forthcoming 1981–85 plan period.

To date, Poland has not released specific details on its foreign trade plans for the 1980s because of the continuing uncertain economic situation. Nevertheless, one major objective will be to boost exports to the Industrialized West by as much as possible. In addition, one can infer on the basis of past policies and on the fact that changes in a country's export structure evolve slowly what Poland's major export categories will be during 1981–85.

In general, Poland's prospects are not bright for realizing *substantial* expansion in hard currency earnings. Problems that thwarted Polish plans during the 1970's remain, while new unforseen problems may arise. Whereas Poland launched its massive development program during an "upswing" in Western economic activity, it must now try to achieve goals—that it couldn't achieve in the 1970s—during a period of uncertain economic activity in the Industrialized Western countries. OECD forecasts for growth of the Industrialized West countries in the 1980s are less than optimistic. Western economic prosperity will, therefore, play an important role in determining Poland's ability to boost its exports. In addition, greater protectionism in the Industrialized West would hinder Polish attempts to increase its exports.

An examination of Poland's export capabilities by commodity grouping follows:

Mineral Fuels

Mineral fuels, especially coal, will be an important export earner for Poland in 1981–85. Poland is the fourth largest coal producer in the world, and the second largest coal exporter; half of Poland's coal shipments go to hard currency countries. Coal is not only the key domestic energy resource (accounting for three-fourths of energy needs), but also the primary hard currency earning commodity. The importance of coal as an export commodity rests on Poland's vast reserves, whose development has been steadily maintained and will likely continue to be so in the future. Polish coal technology is also advanced, a factor which has figured favorably in coal development efforts.

Poland's labor strife has hit the coal industry hard by lowering the length of the work week as well as by reducing labor productivity. Whereas Polish coal output reached a record 201 million tons in 1979, output in 1981 may only reach 160–165 million tons. Given Polish domestic energy requirements of almost 150–160 million tons of coal per annum, Polish coal exports may be as low as 15 million tons in 1981—compared to 41 million tons in 1979. Moreover, because of changes created by the new labor agreements, some Polish economists do not envision Polish coal production reaching 200 million tons again until 1985. Thus, at least for 1981–85, Polish coal exports may be at levels substantially below those of the 1970s unless the Government implements policies getting workers back into the mines. However, there are no guarantees that even then, Poland will be able to reach planned coal production levels.

Foodstuffs

Meat and meat preparations (SITC 01), Poland's second largest export group, accounted for 7.9 percent of exports to the Industrialized West in 1979—substantially down from its 13.6 percent share in 1972. As noted earlier, Poland's agricultural and pricing problems, which have led to considerable consumer unrest over chronic meat shortages, forced the Government to restrict such exports in the late 1970s.

Looking at Polish agricultural developments in the late 1970s, prospects appear pessimistic for the future growth of meat exports. One of the primary objectives of the Government over the next several years will be to satisfy consumer demands for basic products. Certainly, meat is the foremost among the basics. Livestock numbers and meat production still have not reached peak 1974 levels and, given favorable agricultural conditions and policies, it will take at least two to three years to regenerate supplies to what may only be approaching adequate levels. Admittedly the Poles are as much hard pressed to earn hard currency as they are to satisfy consumer demands. Therefore, the choice between meat allocation for export versus domestic consumption will be difficult, with the probable result that meat exports, if they do increase, will do so modestly.

Machinery and Transport

An examination of Poland's manufactured exports is particularly interesting because it involves a look at some commodities that have been exported only recently. The development of new items for export reflects an effort to adjust the commodity composition of Poland's exports. As previously noted, during the 1971–75 Five-Year Plan, Poland adopted a deliberate policy of modernizing its manufacturing base through massive imports of Western plant, equipment, and technology. This effort, combined with the continuing development of traditional manufactured goods, was aimed at enabling Poland to significantly expand exports of manufactures beginning in the second half of the seventies.

Among manufactures, Poland's 1979 major hard currency earning groups were transport equipment (SITC 73), clothing (SITC 84), and power generating machinery (SITC 72). These three groups together accounted for almost three-fourths of hard currency earnings from finished manufactured goods exports to the Industrialized West in 1979.

The largest manufactured group exported, and one which exhibited the fastest growth over the period was transport equipment (SITC 73). Exports of ships (SITC 7353) accounted for most of this increase. Over 90 percent of hard currency earned by commodities in this sector came from exports of ships. Since 1972, earnings from ships have increased more than five-fold to reach nearly $300 million in 1979.

At a time when traditional Western shipbuilders are suffering from lack of orders, demand for Polish ships will keep Poland's shipyards booked with orders until the early 1980's. It appears that price competitiveness along with advanced shipbuilding technology, has enabled Poland to weather the global slump in shipbuilding industries. Poland's shipyards are highly export oriented with over 90 percent of production covered by global exports. As a result, hard currency exports from ships are likely to continue the upward trend of recent years.

Passenger cars (SITC 7321), the other significant item in the transport group, expanded earnings substantially during the 1970's. Poland has planned to significantly expand its automobile exports to the West, based on sales of the "Polski-Fiat," manufactured under license from the Italian Fiat concern. Half of all production is to be exported overseas in the future, with the United States, Great Britain, Canada, and Ireland as major targets. Passenger car exports may show significant improvement in the 1980's if Poland is successful in its drive to expand motor vehicle production. Domestic demand, however, has been increasing sharply, and it may very well be that a good deal of increased car production will have to be turned into the home market. In addition, to effectively exploit the Western market in this area, Poland will have to upgrade its production quality, delivery times, supply of spare parts, and after-sales servicing.

Future expansion in hard currency earnings from clothing exports (SITC 84) will probably be constrained by Western import restriction measures. Textile agreements, outlining quotas on clothing imports, have been negotiated with the United States in early 1978 and a preliminary agreement is in effect with the EC. The EC agreement has allowed for about a four percent annual increase in clothing item exports through 1981. Future growth rates (1981–85) are expected to remain low. This limited growth rate could, however, be revised slightly upward if Poland can successfully negotiate bilateral agreements, *e.g.*, with West Germany, that allow for more rapid increases. To the extent that Western import barriers remain in effect, which they are likely to do for some time, Poland's hard currency earnings from clothing exports are not likely to achieve a very dynamic growth.

Export earnings from nonelectric machinery (SITC 72) are likely to improve in the early 1980's as exports under earlier buyback agreements come on stream. Deliveries of tractors from a Massey-Ferguson deal were scheduled to begin in 1978, and these may boost exchange earnings in the future. Overall, however, it seems that the most promising growth, in the near term, for finished manufactured products will come in ships. Exports of clothing, some other light industry products (e.g. sports equipment), tractors, passenger cars, machine tools, and internal combustion engines will probably advance at more moderate rates.

A further word of caution should be noted about Poland's ability to boost exports of manufactured goods to the Industrialized West in 1981–85. When most of the "new" production is available for export, it will represent technology that is five to 10 years old. Moreover, it will have to penetrate markets that are already well supplied. A survey of technology transfers to CMEA countries, including Poland, from West German firms shows that 50 percent of the coproduction deals involved goods that already face saturated Industrialized West, or Western markets and another 44 percent involved goods that are moving in that direction.

Basic Industrial Goods

Poland's exports of basic manufactures will continue to be dominated by nonferrous metals and iron and steel exports. Nonferrous metal exports (SITC 68) to the Industrialized West have consisted primarily of exports of copper, silver, and zinc. It is notable that nonferrous metal earnings have risen substantially despite continuing sluggish Industrialized West markets for the metals comprising that group.

Copper, which is the largest component of the nonferrous aggregation, has in recent years been one of Poland's most important hard currency earners among individual nonferrous commodities. Over 50 percent of Polish nonferrous metal exports to the Industrialized West have been copper. Poland is said to possess Europe's largest copper reserves, and to develop these deposits, an extensive modernization scheme has been underway. Poland has sought Western help, primarily in terms of credits tied specifically to development of copper. It is clear that the Poles are committed to expanding their copper capacity, an effort which may very well pay off in the 1980's if, as some expect, Western demand and prices rise significantly.

For the near term, Polish copper exports will probably continue to increase moderately, as will earnings, despite persistent problems in demand and price. As with coal, copper exports are laid out largely through long-term contracts. For example, in 1975 Poland agreed to deliver 25 thousand tons per annum to France for the next fifteen years. In 1976 Poland signed a deal with West Germany to deliver 40 thousand tons/annum for the next twelve years. There is some indication that Italy is interested in negotiating for 50 thousand/tons/annum in return for aid in copper development.

In addition to improved copper exports, zinc and silver exports should also be rising. If Western economies rebound from the depressed levels of the late 1970's, exports of these commodities will undoubtedly register improved performance. Nevertheless, the value of these exports will be greatly influenced by Western price movements—which, at times can be volatile. For nonferrous metals exports on the whole, therefore, the near term prospects indicate a moderate expansion which could be significantly improved with better economic performance in the West.

Chemicals and Sulfur

Polish planners expect significant increases in exports of chemicals to the Industrialized West in the 1980's. Poland specifically plans to boost exports of sulfur and sulfuric acid, soda, nitrogen fertilizers, polyvinyl chloride (PVC), and synthetic fibers. Presently, Poland is the largest world exporter of sulfur, exporting over 70 percent of production. Almost half of these exports go to hard currency countries. Continued development of the Tarnobrzeg sulfur basin will enable Poland to continue expanding its exports. It appears that earnings from such exports will rise in the 1980's, so long as there exists sufficient world demand.

Polish chemical exports could expand rapidly in the 1980's depending on world demand. Large investment made earlier in the chemical industry is just now beginning to be realized in the expansion of output. A $700 million heavy soda plant, constructed by a French-German consortium, came on stream in 1977–78 and has allowed for greater exports of caustic soda. Nitrogen fertilizer exports could increase in 1980–85 because an ammonia fertilizer complex was completed in 1980 under a $400 million agreement with Creusot-Loire of France. In addition, chemical earnings may also be boosted as a result of a commodity payback agreement signed in 1975 with British Petrocarbon Developments, Ltd. The $450 million deal calls for the annual export—scheduled to begin in 1980—of almost $125 million in PVC.

VI. POLAND'S HARD CURRENCY TRADE AND DEBT OUTLOOK, 1981–85

Given Poland's uncertain domestic economic and foreign trade situation as well as the uncertainties generated by current debt rescheduling negotiations, projections of Poland's overall hard currency trade and debt situation by yearend 1985 are not feasible at this time. Poland's hard currency imports during 1981–85 will be highly dependent on two variables: its export earnings and the amount of Western credit financing received during the period. To date, these two variables are unknown.

On the export side, Poland's exports to the West are uncertain until the economy is stabilized and can begin operating at near "normal". Assuming that Warsaw can get its economy back on track, one could expect Poland's hard currency exports to grow by 12 to 15 percent per year. But at this time, it is difficult to predict what will happen on that front.

On the financing side, it is difficult to project what Poland will be able to obtain. Since the imposition of martial law, Poland's financial situation has deteriorated even further. As long as martial law remains in effect, Western governments are expected to be less forthcoming with official assistance. Moreover, Warsaw soon must begin negotiations with Western banks and governments on a rescheduling of its 1982 debt-service payments. Such payments may reach the 1981 levels of $10 billion and negotiations to reschedule this amount at best will be difficult.

Thus, the bottom line may be that throughout 1981–85, Poland will be forced to conduct its trade on a cash-only basis, i.e., import levels could not be more than export earnings. Access to official Western credits, however, would allow Poland to increase its import capacity and, therefore, starve off severe economic disruptions. Needless to say by 1985, Poland's hard currency debt will be substantially higher than the $26 billion recorded at yearend 1981 if, as many observers predict, Warsaw is forced to reschedule its debt each year during 1981–85 and try to obtain new credits to cover its interest obligations.

VII. U.S.-Polish Trade Potential, 1981–85

U.S.-Polish trade basically was normalized in 1960 when the U.S. restored MFN status to Poland. In 1972, Poland became eligible to participate in programs of the Eximbank and Commodity Credit Corporation. In addition, unlike Hungary, Romania, and the PRC, Poland's MFN status is not subject to the Jackson-Vanik provisions of the Trade Act of 1974 requiring that Congress annually reconsider whether or not the country in question meets the requirements for MFN. Thus, before the imposition of U.S. sanctions, U.S.-Polish economic relations were the most fully normalized of all the communist countries. The imposition of sanctions coupled with Poland's dismal economic situation make the outlook for U.S.-Polish trade bleak.

A. U.S. EXPORTS TO POLAND

U.S. exports to Poland have traditionally been dominated by agricultural commodities. In 1980, agricultural commodities, chiefly corn and soybean oil and cake, represented two-thirds of total U.S. exports to Poland. In the first three quarters of 1981, this share had risen to 78 percent of total exports to Poland. The high share of agricultural products in total U.S. exports to Poland reflects poor Polish harvests over the last five years as well as Government efforts to boost meat production.

U.S. exports to Poland during 1981–85 will be highly dependent on the availability of financing, both official and private. Availability will be especially crucial in the area of agricultural exports. In the past, the CCC program has allowed Poland to finance the bulk of its U.S. grain purchases. Such financing in the future, however, is now unavailable to Poland as a result of the U.S. sanctions.

To the extent that Poland can get its economy back on track, the best opportunities for American business in 1981–85 are seen in sales of fertilizers, agricultural chemicals and machinery, as well as grain storage and food processing equipment. If Poland is to continue developing its coal, copper, sulfur, and other extractive industries, there will probably exist markets for mineral extraction and processing equipment and related machinery. The ship building industry, since it is a large hard currency earner, will continue to receive investment funding. In addition, commercial arrangements featuring buy-back or repayment in industrial goods, as well as joint ventures in third countries, will likely be encouraged.

B. U.S. IMPORTS FROM POLAND

Traditionally, U.S. imports from Poland have been dominated by manufactured goods, which have accounted for 50 to 60 percent of total U.S. imports. The leading manufactured goods imports have been drilling, milling, and boring machines, clothing and fabrics, iron and steel plates, and iron and steel nails, screws, bolts, etc.

Agricultural imports account for almost 40 percent of U.S. imports from Poland. Canned hams and other pork products are the most significant items in U.S. agricultural imports. In 1980, imports of these products accounted for 90 percent of U.S. agricultural imports and one-third of total U.S. imports from Poland. U.S. imports of these commodities, however, were 6 percent lower in 1980 over the 1979 level. The lower level of ham/pork product imports resulted from Polish supply constraints rather than reduced U.S. demand. As noted earlier, Poland's dismal agricultural performances during 1976–80 and the need to ease domestic meat shortages have forced the government to limit such exports.

U.S. imports from Poland during 1981–85 will be greatly affected by the supplies of Polish goods available for export—industrial as well as agricultural goods. Lower industrial production may limit supplies available to the U.S. and other hard currency markets, although Poland will try very hard to maintain such exports. In the case of agricultural products, Poland faces severe domestic meat shortages which may continue to limit supplies available for export. In addition, feed shortages have led to reductions in hog inventories, implying that 1981 pork production is expected to be significantly below the 1980 level. These reductions could mean that Poland, which sent 96 percent of its total 1980 exports of canned hams and shoulders to the U.S., may have to reduce deliveries of those commodities in at least the 1981–82 period.

APPENDIX

TABLE A-1.—POLAND: FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960–80

[Millions of U.S. dollars]

	1960	Percent of total	1970	Percent of total	1974	Percent of total	1978	Percent of total	1979	Percent of total	1980	Percent of total [1]
Imports	$1, 495	100. 0	$3, 608	100. 0	$10, 429	100. 0	$16, 513	100. 0	$18, 078	100. 0	$19, 123	100. 0
Of which:												
U.S.S.R.	465	31. 1	1, 361	37. 7	2, 323	22. 3	5, 036	30. 5	5, 829	32. 2	6, 628	34. 7
East Europe	400	26. 8	1, 000	27. 7	2, 016	19. 3	3, 549	21. 5	3, 889	21. 5	3, 903	20. 4
Developed countries	447	29. 9	938	26. 0	5, 335	51. 2	6, 531	39. 6	6, 631	36. 7	6, 446	33. 7
Less developed countries	99	6. 6	196	5. 4	495	4. 7	861	5. 2	1, 347	7. 5	1, 654	11. 2
Exports	1, 326	100. 0	3, 548	100. 0	8, 260	100. 0	14, 527	100. 0	16, 846	100. 0	16, 938	100. 0
Of which:												
U.S.S.R.	390	29. 4	1, 251	35. 3	2, 341	28. 3	5, 006	34. 5	6, 078	36. 1	5, 612	33. 1
East Europe	335	25. 3	882	24. 9	1, 985	24. 0	3, 384	23. 3	3, 743	22. 2	3, 790	22. 4
Developed countries	403	30. 4	1, 024	28. 9	3, 042	36. 8	4, 425	30. 5	5, 043	29. 9	5, 792	34. 2
Less developed countries	93	7. 0	258	7. 3	641	7. 8	1, 073	7. 4	1, 310	7. 8	1, 154	10. 3

[1] Preliminary.

Source: CIA, Handbook of Economic Statistics, (ER 80–452), October 1980. Preliminary data for 1980 furnished by the CIA.

TABLE A-2.—POLAND: HARD CURRENCY TRADE, 1970–79 [1]

[Millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	Average annual growth rate, 1974–79 (percent)
Imports	1,247	6,090	7,104	7,544	7,411	7,928	8,360	6.5
Exports	1,415	3,934	4,477	4,771	5,293	6,137	7,025	12.3
Trade turnover	2,662	10,024	11,581	12,315	12,704	14,065	15,385	8.9
Balance	+168	−2,156	−2,627	−2,773	−2,118	−1,791	−1,335	

[1] Includes developed and less developed countries.

Source: CIA, Handbook of Economic Statistics, (ER 80–452), October 1980.

TABLE A-3.—UNITED STATES-POLISH TRADE

[Millions of U.S. dollars]

	1974	1979	1980	1981
U.S. exports	394.6	786.3	710.5	680.6
Of which:				
Agricultural	253.3	651.4	571.5	592.9
Manufactured	131.7	104.8	94.4	59.1
Other	9.6	30.1	44.6	28.6
U.S. imports	265.9	426.5	416.7	365.1
Of which:				
Agricultural	88.4	165.0	154.0	109.7
Manufactured	168.3	230.4	240.5	241.8
Other	9.2	31.1	22.2	13.6
Trade turnover	660.5	1,212.8	1,127.2	1,045.7
Balance	+128.6	+359.8	+293.7	+315.4

Source: U.S. Census Bureau magnetic tapes.

TABLE A-4.—POLAND: HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1971	1978	1979	19 8
Commercial debt	420	14,000	16,500	14,800
Of which:				
Owed to U.S. banks	([1])	1,315	1,515	1,274
Officially backed debt	718	4,200	4,800	10,100
Gross debt	1,138	18,200	21,300	25,000
Commercial assets	(374)	(900)	(1,100)	(1,000)
Net debt	764	17,300	20,200	24,000

[1] Not available.

Source: U.S. Government.

TABLE A-5.—POLAND'S TRADE WITH THE INDUSTRIALIZED WEST (IW), 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979
Imports from IW	$4,395.9	$5,266.1	$5,261.0	$4,750.0	$5,314.7	$5,726.0
United States	$394.6	$580.0	$621.0	$436.5	$677.1	$786.3
U. S. share (percent)	9.0	11.0	11.8	9.1	12.7	13.7
European Community	$2,922.1	$3,264.2	$3,160.0	$2,904.8	$3,198.8	$3,395.2
European Community share (percent)	66.5	62.0	60.1	60.8	60.2	59.3
Of which:						
Foodstuffs [1]	$405.5	$590.9	$821.5	$552.5	$927.9	$1,176.1
United States	$189.4	$317.0	$444.9	$266.5	$435.9	$551.2
U. S. share (percent)	46.7	53.6	54.2	48.2	47.0	46.9
European Community	$127.0	$142.6	$192.0	$124.1	$272.0	$385.9
European Community share (percent)	31.3	24.1	23.4	22.5	29.3	32.8
Manufactured [2]	$3,634.4	$4,275.0	$4,095.3	$3,856.4	$3,943.5	$4,027.8
United States	$131.7	$180.5	$123.9	$114.2	$141.6	$104.8
U. S. share (percenr)	3.6	4.2	3.0	3.0	3.6	2.6
European Community	$2,648.7	$2,982.3	$2,830.7	$2,742.7	$2,762.3	$2,813.4
European Community share (percent)	72.9	69.8	69.1	71.1	70.0	69.8
High technology	$502.9	$601.6	$633.2	$628.7	$682.0	$636.0
United States	$24.2	$39.4	$39.6	$38.9	$54.2	$27.5
U.S. share (percent)	4.8	6.5	6.3	6.2	7.9	4.3
European Community	$357.0	$414.5	$414.6	$396.4	$446.7	$430.1
European Community share (percent)	71.0	68.9	65.5	63.1	65.5	67.6
Exports to IW	$2,681.3	$2,958.7	$3,389.9	$3,604.5	$4,076.9	$4,759.4
United States	$265.9	$243.1	$318.8	$329.0	$438.9	$426.5
U.S. share (percent)	9.9	8.2	9.4	9.1	10.8	9.0
European Community	$1,753.5	$1,974.3	$2,210.4	$2,355.8	$2,785.1	$3,260.3
European Community share (percent)	65.4	66.7	65.2	65.4	68.3	68.5
Trade turnover with IW	$7,077.2	$8,224.8	$8,650.9	$8,384.5	$9,391.6	$10,485.4
Balance	−$1,714.6	−$2,307.4	−$1,871.1	−$1,175.5	−$1,237.8	−$966.6
Balance with United States	−$128.7	-$336.9	−$302.2	−$107.5	−$238.2	−$359.8
Balance with European Community	−$1,168.6	−$1,289.9	−$949.6	−$549.0	−$413.7	−$134.9

[1] SITC 0, 1, 4.

[2] SITC 5–8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF POLAND'S IMPORTS FROM THE INDUSTRIALIZED WEST, 1974–79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	Percent of 1979 total	Average annual growth (percent)
Imports from Industrialized West	$4,395.9	$5,266.1	$5,261.0	$4,780.0	$5,314.7	$5,726.0	100.0	5.4
Foodstuffs (SITC 0, 1, 4)	405.5	540.9	821.5	552.5	927.9	1,176.1	20.5	23.7
Live animals	1.2	1.1	1.9	1.0	.4	.3		
Cereals	223.3	460.0	636.6	353.6	657.7	867.4		
Meat and meat preparations	.6	.5	8.9	25.9	1.8	5.2		
Feeding stuff for animals	102.8	53.9	90.2	66.2	144.6	125.4		
Beverages and tobacco	13.4	11.8	15.5	20.9	24.2	29.7		
Fixed vegetable oils, fats	17.4	14.0	10.5	7.9	11.3	27.3		
Other	46.8	49.6	57.9	76.9	87.9	120.8		
Crude materials (SITC 2)	264.1	315.7	248.7	281.4	361.6	421.4	7.4	9.8
Oil-seeds oil nuts	51.6	42.7	13.6	5.4	41.9	55.6		
Textile fibers	62.6	58.4	51.2	60.3	79.8	97.5		
Crude fertilizers	15.8	35.9	23.9	46.6	66.2	64.0		
Metal ores and scrap	57.3	91.1	84.4	85.3	78.6	71.6		
Other	76.8	87.6	75.6	83.8	95.1	227.8		
Mineral fuels (SITC 3)	44.8	40.5	41.8	41.8	34.0	41.9	.7	−1.3
Petroleum products	41.6	38.8	41.7	41.7	34.0	40.3		
Coal, coke, briquettes	2.9	.9	.1	.1	0	1.6		
Other	.3	.8	0	0	0	0		
Chemicals (SITC 5)	492.6	530.7	601.2	641.4	700.9	848.4	14.8	11.5
Chemical elements, compounds	176.7	179.7	218.5	224.8	265.1	342.4		
Organic	(130.1)	(123.1)	(157.4)	(155.4)	(187.4)	(244.9)		
Inorganic	(36.0)	(36.4)	(42.8)	(47.3)	(42.2)	(54.3)		
Plastics	125.7	132.1	163.2	164.7	186.3	219.0		
Dyes, tanning products	76.5	61.5	56.0	66.2	68.6	72.4		
Medicinal products	24.4	30.2	37.9	42.3	49.8	60.8		
Other	89.3	127.2	125.6	143.4	131.1	153.0		
Basic industrial goods (SITC 6)	1,475.9	1,529.3	1,320.6	1,195.2	1,209.9	1,401.4	24.5	−1.1
Iron and steel	737.9	854.6	691.6	564.6	543.7	612.0		
Textile fibers, yarn, fabric	264.6	189.5	180.0	180.0	207.3	253.6		
Nonferrous metals	84.0	68.9	64.3	78.6	73.7	79.1		
Metal manufacturers	151.0	178.8	154.1	151.1	150.6	152.3		
Rubber manufactures	42.4	42.4	54.2	50.2	59.0	83.2		
Paper, paper products	85.1	85.3	79.7	61.3	71.9	108.3		
Nonmetallic mineral manufactures	82.6	87.6	80.1	82.1	88.0	90.4		
Other	28.3	22.2	24.6	27.3	15.7	22.5		
Machinery, transport equipment (SITC 7)	1,521.8	2,064.8	1,908.0	1,849.9	1,866.6	1,621.5	28.2	1.2
Nonelectric machinery	1,059.7	1,366.0	1,374.6	1,295.3	1,413.1	1,113.8		
Electric machinery	219.7	301.2	346.9	333.3	302.8	287.2		
Transport equipment	242.7	397.6	258.5	221.3	150.7	211.5		
Miscellaneous manufactured goods (SITC 8)	144.1	150.2	185.5	169.9	166.1	165.5	2.9	2.8
Furniture	3.8	6.9	8.7	4.9	3.9	2.8		
Clothing	25.2	21.5	25.7	24.3	16.6	21.4		
Precision manufactured goods	54.0	55.0	70.0	67.4	72.9	68.7		
Miscellaneous consumer articles	59.4	55.0	67.6	66.8	67.9	64.0		
Other	9.9	12.8	13.5	6.4	4.8	7.8		
Other	47.1	44.0	53.7	47.9	47.7	58.8	1.0	4.5

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-7.—LEADING POLISH IMPORTS FROM THE INDUSTRIALIZED WEST (IW), 1977–79

[Thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 rank	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES											
71	Machinery, nonelectric	1	$1,113,785	19.5		0	$1,413,126	26.6		$1,295,263	27.1	
04	Cereals, cereal preparations	2	867,367	15.1		0	657,661	12.4		353,589	7.4	
67	Iron and steel	3	612,005	10.7		0	543,709	10.2		564,572	11.8	
51	Chemical elements, compounds	4	342,357	6.0		0	265,137	5.0		224,809	4.7	
72	Machinery, electrical	5	287,169	5.0	56.3	0	302,835	5.7	59.9	333,338	7.0	58.0
65	Textile yarn, fibers	6	253,571	4.4		0	207,269	3.9		180,019	3.8	
58	Plastic materials	7	219,820	3.8		0	186,335	3.5		164,728	3.4	
73	Transport equipment	8	211,530	3.7		0	150,624	2.8		221,285	4.6	
69	Metal manufactures, n.e.s	9	152,327	2.7		0	150,559	2.8		151,052	3.2	
08	Animal feedstuffs	10	125,389	2.2	73.1	0	144,642	2.7	75.7	66,283	1.4	74.4
	Top 50 total		5,701,466				5,284,710			4,756,676		
	Total imports from 17 IW		5,726,040				5,314,749			4,779,931		
	Top 50 as percent of total imports from 17 IW		99.6				99.4			99.5		
	5-DIGIT SITC AGGREGATES											
0410	Wheat	1	$334,732	5.8		0	$189,998	3.6		$167,953	3.5	
0440	Corn	2	253,889	4.4		0	164,438	3.1		131,854	2.8	
7151	Machine tools for working metals	3	187,321	3.3		0	264,095	5.0		203,443	4.3	
0430	Barley	4	186,705	3.3		0	246,669	4.6		25,058	.5	
5812	Products of polymerization	5	124,558	2.2	19.0	0	96,215	1.8	18.1	91,650	1.9	13.0
6782	Iron tubes and pipes	6	117,025	2.0		0	98,811	1.9		84,972	1.8	
0813	Oil-seed cake and meal	7	99,548	1.7		0	130,329	2.5		48,910	1.0	
73289	Other motor vehicle parts	8	91,175	1.6		0	86,254	1.6		93,613	2.0	
7198	Machinery and mechanical appliances	9	89,254	1.6		0	197,641	3.7		138,035	2.9	
71931	Lifting and loading machinery	10	78,997	1.4	27.3	0	96,311	1.8	29.6	115,072	2.4	23.0
6715	Other ferro-alloys	11	78,772	1.4		0	39,312	.7		26,258	.5	
67431	Iron/steel plates/sheets (nonhigh carbon)	12	61,300	1.1		0	46,244	.9		63,594	1.3	
5811	Products of condensation, polyadditive	13	59,525	1.0		0	57,415	1.1		60,564	1.3	

2214	Soybeans	14	54,585	1.0		0	39,827	.7		0	0	
6783	Iron/steel tubes, pipes (noncast iron)	15	53,572	.9	32.7	0	54,770	1.0	34.0	59,019	1.2	27.4
51212	Other hydrocarbons	16	51,714	.9		0	27,601	.5		16,030	.3	
7222	Electrical apparatus for circuits	17	51,648	.9		0	67,656	1.3		69,010	1.4	
59999	Other chemical products	18	51,270	.9		0	38,164	.7		35,787	.7	
65164	Synthetic yarn, discontinuous	19	49,786	.9		0	41,853	.8		30,206	.6	
6911	Iron/steel structural parts	20	49,681	.9	37.1	(¹)	52,770	1.0	38.3	47,919	1.0	31.6
67501	Iron/steel hoop/strip (nonhigh carbon)	21	48,081	.8		0	40,000	.8		40,440	.8	
65161	Synthetic yarns, continuous	22	47,600	.8		0	39,239	.7		26,860	.6	
71919	Other heat, cold-treating apparatus	23	45,693	.8		0	68,095	1.3		86,377	1.8	
71922	Pumps for gases	24	41,954	.8		0	35,632	.7		32,535	.7	
71954	Machine tools parts	25	41,120	.7	41.1	0	28,228	.5	42.3	28,945	.6	36.1
	Top 50 total											
	Total imports from 17 IW											
	Top 50 as percent of total imports from 17 IW											

[1] 1978 rank greater than 200.

Source: U.S. trade data, magnetic tapes.

TABLE A-8.—ORIGINS OF LEADING POLISH IMPORTS FROM THE INDUSTRIALIZED WEST

[Millions of U.S. dollars]

1979 item rank	SITC	Description: Origin	1979 Origin rank	1979 Value	1979 Item/origin percent of total	1977 Origin rank	1977 Value	1977 Item/origin percent of total
1	71	Machinery, non-electric		$1,113.8	19.5	--------	$1,295.3	27.1
		Federal Republic of Germany	1	332.7	29.9	1	419.5	32.4
		United Kingdom	2	150.3	13.5	2	135.3	10.4
		France	3	135.0	12.1	3	122.2	9.4
		United States	9	41.1	3.7	8	59.5	4.6
		European Community		765.7	68.7	--------	868.1	67.0
2	04	Cereals, cereal preparations		867.4	15.1	--------	353.6	17.4
		United States	1	399.0	46.0	1	197.7	55.9
		Canada	2	145.8	16.8	2	94.1	26.6
		France	3	112.6	13.0	3	42.9	12.1
		United Kingdom	4	68.3	7.9	4	6.1	1.7
		European Community		252.5	29.1	--------	17.2	4.9
3	67	Iron and steel		612.0	10.7	--------	564.6	11.8
		Federal Republic of Germany	1	186.4	30.5	1	210.6	37.3
		Austria	2	104.6	17.1	2	78.4	13.9
		France	3	76.2	12.4	3	60 6	10.7
		United States	15	.3	.1	15	1.2	.2
		European Community		390.8	63.9	--------	394.6	69.9
4	51	Chemical elements, compounds		342.4	6.0	--------	224.8	4.7
		Federal Republic of Germany	1	105.0	30.7	1	63.2	28.1
		France	2	50.0	14.6	2	25.8	11.5
		Netherlands	3	40.4	11.8	3	22.0	9.8
		United States	9	8.4	2.5	11	3.3	1.5
		European Community		256.7	75.0	--------	156.1	69.4
5	72	Electrical machinery		287.2	5.0	--------	333.3	7.0
		Federal Republic of Germany	1	84.2	29.3	1	70.6	21.2
		United Kingdom	2	33.3	11.6	2	59.9	18.0
		Japan	3	30.6	10.7	3	42.7	12.8
		United States	8	14.7	5.1	9	10.3	3.1
		European Community		180.1	62.7	--------	218.3	65.5

Source: U.N. trade data magnetic tapes.

TABLE A-9.—INDUSTRIALIZED WEST (IW) EXPORT TRADE SHARES, 1974–79

[Thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW total	$4,395,889	100.0	$5,266,122	100.0	$5,260,996	100.0	$4,779,931	100.0	$5,314,749	100.0	$5,726,040	100.0	$30,743,727	100.0
Belgium-Luxembourg	208,852	4.8	217,118	4.1	205,331	3.9	164,742	3.4	148,725	2.8	174,944	3.1	1,119,712	3.6
Denmark	118,490	2.7	130,858	2.5	86,602	1.6	85,334	1.8	100,713	1.9	97,631	1.7	619,628	2.0
Federal Republic of Germany	1,402,662	31.9	1,302,294	24.7	1,279,576	24.3	1,245,608	26.1	1,323,335	24.9	1,348,390	23.5	7,901,963	25.7
France	373,925	8.5	626,605	11.9	749,461	14.2	482,703	10.1	504,288	9.5	605,747	10.6	3,342,729	10.9
Ireland	5,582	.1	6,964	.1	10,370	.2	9,760	.2	11,302	.2	7,326	.1	51,304	.2
Italy	330,389	7.5	402,543	7.6	327,681	6.2	385,790	8.1	395,670	7.4	305,719	6.7	2,227,792	7.2
The Netherlands	159,530	3.6	187,286	3.6	160,876	3.1	181,425	3.8	204,342	3.8	224,948	3.9	1,118,407	3.6
United Kingdom	322,699	7.3	390,577	7.4	340,084	6.5	349,384	7.3	510,425	9.6	550,497	9.6	2,463,666	8.0
European Community Sub-total	2,922,129		3,264,245		3,159,979		2,904,846		3,198,800		3,395,202		18,845,201	
Austria	233,350	5.3	332,261	6.3	375,049	7.1	356,777	7.5	371,781	7.0	435,867	7.6	2,105,085	6.8
Canada	87,275	2.0	112,744	2.1	126,793	2.4	139,802	2.9	189,563	2.6	228,376	4.0	884,553	2.9
Finland	47,477	1.1	70,060	1.3	71,949	1.4	56,442	1.2	52,753	1.0	50,119	.9	348,800	1.1
Japan	220,453	5.0	257,036	4.9	253 747	4.8	209.829	6.3	265,647	6.3	221,117	3.9	1,517,829	4.9
Norway	53,296	1.2	63,105	1.2	109,175	2.1	84,088	1.8	74,695	1.4	88,993	1.6	473,352	1.5
Sweden	295,207	6.7	408,960	7.8	364,973	6.9	317,817	6.6	295,872	5.6	327,153	5.7	2,009,982	6.5
Switzerland	142,114	3.2	177,621	3.4	6178,296	3.4	183,794	3.8	188,551	3.5	192,955	3.4	1,065,331	3.5
United States	394,588	9.0	580,090	11.0	21,035	11.8	436,536	9.1	677,087	12.7	786,258	13.7	5,405,594	11.4

Source: U.N. trade data, magnetic tapes.

TABLE A-10.—COMPOSITION OF POLISH EXPORTS TO THE INDUSTRIALIZED WEST, 1974-79

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	Percent of 1979 total	Average annual growth (percent)
Exports to the Industrialized West	$2,681.3	$2,958.7	$3,390.0	$3,604.5	$4,076.9	$4,759.4	100.0	12.2
Foodstuffs (SITC 0, 1, 4)	522.4	494.3	589.0	618.5	706.7	788.2	16.6	8.6
Live animals	106.8	68.1	85.8	102.0	139.5	164.6		
Meat and meat preparations	242.6	266.3	292.8	277.0	339.3	373.9		
Fish and fish preparations	26.2	26.6	31.4	30.1	21.1	42.8		
Fruits and vegetables	67.7	71.3	110.4	129.3	126.8	121.9		
Beverages and tobacco (SITC 1)	11.6	16.4	22.0	22.9	27.9	22.6		
Oil and fats (SITC 4)	8.6	9.7	10.1	15.4	16.6	16.0		
Other	58.9	35.9	36.5	41.8	35.5	46.4		
Crude materials (SITC 2)	282.7	275.0	330.4	336.6	343.2	443.1	9.3	9.4
Wood, lumber, cork	101.2	100.9	117.4	110.1	126.1	161.9		
Crude fertilizers, minerals	72.7	87.2	82.8	91.2	94.0	110.8		
Hides, skins, fur skins	33.3	30.4	34.9	41.7	50.6	75.5		
Others	75.5	56.5	95.3	93.6	72.5	94.9		
Mineral fuels (SITC 3)	824.0	1,081.7	1,049.7	958.0	1,034.9	1,250.7	26.3	8.7
Coal, coke, briquettes	751.7	995.4	864.2	798.7	868.5	1,005.5		
Petroleum products	69.9	83.8	182.1	153.0	157.0	234.9		
Other	2.4	2.5	3.4	6.3	9.4	10.3		
Chemicals (SITC 5)	138.0	114.8	140.3	143.1	162.2	181.8	3.8	5.7
Chemical elements, compounds	74.0	61.6	68.9	69.8	86.8	101.7		
Organic	(45.7)	(41.8)	(48.0)	(39.2)	(46.2)	(56.7)		
Inorganic	(28.3)	(19.8)	(20.9)	(30.6)	(40.6)	(45.0)		
Manufactured fertilizers	5.6	9.8	27.3	23.0	15.0	23.3		
Other	58.4	43.4	44.1	50.3	60.4	56.8		
Basic manufactures (SITC 6)	461.1	380.1	486.8	558.5	741.7	904.3	19.0	14.7
Nonferrous metals	149.6	131.4	157.9	205.2	253.1	362.8		
Iron and steel	130.8	82.7	123.3	139.2	229.6	219.2		
Textile yarn, fabric	68.7	60.3	77.3	82.0	88.2	115.0		
Nonmetal mineral manufactures	29.0	30.8	32.6	34.6	42.5	53.3		
Other	83.0	74.9	95.7	97.5	128.3	154.0		
Machinery and transport equipment (SITC 7)	201.4	317.1	442.6	558.5	610.6	629.6	13.2	25.6
Transport equipment	75.5	121.0	235.0	315.2	323.8	303.4		
Machinery, nonelectric	90.3	152.1	154.6	181.1	201.3	221.5		
Electrical machinery	35.6	43.9	52.2	62.2	85.4	104.7		
Miscellaneous manufactured goods (SITC 8)	225.3	272.6	323.0	387.8	447.0	530.0	11.1	18.7
Clothing	113.8	134.6	159.0	195.3	232.4	291.9		
Furniture	36.3	46.6	58.9	76.4	79.1	87.6		
Footwear	25.9	38.3	47.7	51.6	61.9	65.2		
Instruments, watches, clocks	7.6	10.3	10.6	13.0	17.3	19.0		
Other	41.7	42.8	46.8	51.5	56.3	66.3		
Other	26.4	23.1	28.2	113.5	30.6	31.7	.7	3.8

Source: U.N. trade data, magnetic tapes.

TABLE A-11.—LEADING POLISH EXPORTS TO THE INDUSTRIALIZED WEST (IW)

[Thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 rank	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES											
32	Coal, coke, and briquettes	1	$1,005,468	21.2		0	$868,458	21.3		$798,728	22.2	
01	Meat and meat preparations	2	373,945	7.9		0	339,297	8.3		277,042	7.7	
68	Nonferrous metals	3	362,791	7.6		0	253,081	6.2		205,177	5.7	
73	Transport equipment	4	303,363	6.4		0	323,790	7.9		315,224	8.7	
84	Clothing	5	291,850	6.1	49.1	0	232,444	5.7	49.5	195,303	5.4	49.7
33	Petroleum products	6	234,920	4.9		0	157,429	3.9		152,950	4.2	
71	Machinery nonelectric	7	221,509	4.7		0	201,338	4.9		181,112	5.0	
67	Iron and steel	8	219,210	4.6		0	229,598	5.6		139,248	3.9	
00	Live animals	9	164,556	3.5		0	139,539	3.4		102,032	2.8	
24	Wood, lumber, and cork	10	161,928	3.4	70.2	0	126,077	3.1	70.4	110,114	3.1	68.7
	Top 50 total		4,720,912				4,041,150			3,586,155		
	Total exports to 17 IW		4,759,444				4,076,858			3,644,453		
	Top 50 as percent of total exports to 17 IW		99.2				99.1			99.5		
	5-DIGIT SITC AGGREGATES											
3214	Coal	1	971,870	20.4		0	845,465	20.7		771,881	21.4	
68212	Refined copper	2	212,790	4.5		0	151,021	3.7		105,329	2.9	
0138	Other prepared meats	3	197,253	4.1		0	182,340	4.5		146,346	4.1	
7353	Ships and boats	4	152,509	3.2		0	229,291	5.6		256,415	7.1	
3323	Distillate fuels	5	140,985	3.0	35.2	0	77,796	1.9	36.4	56,066	1.6	37.1
7321	Passenger motor cars	6	108,601	2.3		0	64,318	1.6		37,388	1.0	
24321	Sawn lumber	7	100,753	2.1		0	80,111	2.0		70,518	2.0	
68111	Silver, unwrought	8	99,787	2.1		0	59,787	1.5		45,557	1.3	
84112	Women's/girls' outer garments	9	92,659	1.9		0	72,697	1.8		58,676	1.6	
0015	Horses, asses, mules	10	79,995	1.7	45.3	0	75,292	1.8	45.1	64,275	1.8	44.7
84111	Men's/boys' outer garments	11	79,712	1.7		0	64,396	1.6		55,713	1.5	
2741	Sulfur	12	71,368	1.5		0	61,190	1.5		81,671	2.3	
2120	Fur skins	13	66,425	1.4		0	44,627	1.1		37,196	1.0	
0011	Bovine cattle	14	66,060	1.4		0	49,782	1.2		26,880	.7	
3324	Residual fuel oils	15	62,350	1.3	52.6	0	32,166	.8	51.3	70,339	2.0	52.3
85102	Leather footwear	16	61,952	1.3		0	57,843	1.4		48,564	1.3	
67411	Iron/steel plates	17	60,145	1.3		0	85,925	2.1		19,124	.5	
7115	Internal combustion engines	18	51,437	1.1		0	71,234	1.7		61,753	1.7	
82109	Furniture	19	50,417	1.1		0	44,683	1.1		46,560	1.3	
7151	Machine tool for working metals	20	47,060	1.0		0	31,702	.8	58.4	23,957	.7	57.8
05361	Preserved fruits	21	42,996	.9		0	45,224	1.1		40,444	1.1	
0114	Poultry, killed or dressed	22	42,304	.9		0	40,915	1.0		33,801	.9	
84144	Outer garments, knitted	23	40,542	.9		0	35,453	.9		24,348	.7	
02101	Chairs and other seats	24	35,624	.7		0	34,007	.8		21,144	.6	
00115	Horse meat	25	31,999	.7	62.4	0	26,505	.7	62.9	22,364	.6	61.8
	Top 50 total		3,561,216				3,072,799			2,628,099		
	Total exports in 17 IW		4,759,444				4,076,858			3,604,453		
	Top 50 as percent of total exports to 17 IW		74.8				75.4			72.9		

Source: U.N. trade data, magnetic tapes.

TABLE A-12.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM POLAND, 1974–79

[Thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		Total, 1974–79	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$2, 681, 323	100. 0	$2, 958, 695	100. 0	$3, 389, 963	100. 0	$3, 604, 453	100. 0	$4, 076, 858	100. 0	$4, 795, 444	100. 0	$2, 1470, 726	100. 0
Belgium-Luxembourg	112, 729	4. 6	122, 698	4. 1	72, 828	2. 1	100, 088	2. 8	112, 016	2. 7	157, 286	3. 3	687, 645	3. 2
Denmark	147, 621	5. 5	183, 205	6. 2	169, 307	5. 0	78, 313	2. 2	92, 669	2. 3	143, 171	3. 0	814, 286	3. 8
Federal Republic of Germany	553, 264	20. 6	581, 797	19. 7	766, 988	22. 6	910, 761	25. 0	1, 037, 471	25. 4	1, 205, 954	25. 3	5, 047, 235	23. 5
France	262, 403	9. 8	352, 652	11. 9	430, 214	12. 7	425, 691	11. 8	542, 586	13. 3	551, 913	11. 6	2, 565, 459	11. 9
Ireland	35, 204	1. 3	30, 379	1. 0	27, 669	. 8	44, 710	1. 2	50, 279	1. 2	67, 039	1. 4	255, 280	1. 2
Italy	279, 155	10. 4	306, 439	10. 4	336, 787	9. 9	352, 062	9. 8	408, 596	10. 0	493, 032	10. 4	2, 176, 071	10. 1
The Netherlands	97, 475	3. 6	143, 138	4. 8	130, 165	3. 8	149, 103	4. 1	135, 320	3. 3	154, 548	3. 2	809, 749	3. 8
United Kingdom	255, 628	9. 5	253, 994	8. 6	276, 467	8. 2	304, 074	8. 4	406, 187	10. 0	487, 377	10. 2	1, 983, 727	9. 2
European Community subtotal	1, 753, 479	----------	1, 974, 302	----------	2, 210, 425	----------	2, 355, 802	----------	2, 785, 124	----------	3, 260, 320	----------	14, 339, 452	----------
Austria	128, 036	4. 8	146, 922	5. 0	152, 391	4. 5	148, 148	4. 1	150, 102	3. 7	202, 409	4. 3	928, 009	4. 3
Canada	44, 890	1. 7	40, 121	1. 4	45, 716	1. 3	43, 954	1. 2	62, 115	1. 5	70, 695	1. 5	307, 401	1. 4
Finland	155, 295	5. 8	167, 651	5. 7	125, 490	3. 7	168, 877	4. 7	177, 620	4. 4	216, 967	4. 6	1, 011, 910	4. 7
Japan	79, 443	3. 0	79, 867	2. 7	77, 045	2. 3	73, 276	2. 0	62, 574	1. 5	72, 935	1. 5	445, 140	2. 1
Norway	52, 348	2. 0	70, 076	2. 4	164, 605	4. 9	186, 754	5. 2	82, 695	2. 0	143, 508	3. 0	609, 986	3. 3
Sweden	165, 632	6. 2	196, 842	6. 7	260, 224	7. 7	254, 734	7. 1	197, 112	4. 8	243, 546	5. 1	1, 318, 090	6. 1
Switzerland	36, 269	1. 4	39, 825	1. 3	35, 294	1. 0	43, 822	1. 2	80, 209	2. 0	82, 965	1. 7	318, 384	1. 5
United States	265, 931	9. 9	243, 079	8. 2	318, 763	9. 4	329, 085	9. 1	479, 307	11. 8	466, 099	9. 8	2, 102, 264	9. 9

Source: U.N. trade data, magnetic tapes.

ROMANIA: PERFORMANCE AND PROSPECTS FOR TRADE WITH THE U.S. AND THE WEST

By Linda S. Droker and John A. Martens*

CONTENTS

		Page
Summary		237
Introduction		239
I.	Romania's Trade Objectives and Performance During the 1970's	240
II.	Romania's Hard Currency Debt at Yearend 1980	241
III.	Romania's Hard Currency Trade Objectives and Strategy: 1981–85	242
IV.	Romanian Hard Currency Export Capabilities, 1981–85	247
V.	Romanian Hard Currency Trade and Debt Outlook, 1981–85	254
VI.	U.S.-Romanian Trade under Normalized Conditions	255
VII.	Legislative Framework for U.S. Commercial Relations with Romania	261
VIII.	Projected 1985 U.S.-Romanian Trade Under Alternative Scenarios	262

TABLES

A–1a.	Romania's Foreign Trade	262
A–1b.	Romania's Foreign Trade	263
A–2.	Romania's Hard Currency Trade, 1970–80	263
A–3.	U.S.-Romania Trade, 1974–80	263
A–4.	Romania: Hard Currency Debt	264
A–5.	Romanian Trade with the Industrialized West and U.S., 1974–80	264
A–6.	Composition of Romanian Imports from the Industrialized West, 1974–80	265
A–7.	Leading Romanian Imports from the Industrialized West	266
A–8.	Origins of Leading Romanian Imports from the Industrialized West	267
A–9.	Industrialized West Import Trade Shares from Romania, 1974–80	268
A–10.	Composition of Romanian Exports to the Industrialized West, 1974–80	269
A–11.	Leading Romanian Exports to the Industrialized West	270
A–12.	Industrialized West Export Trade Shares to Romania, 1974–80	271
A–13.	Projected 1985 Romanian Trade with the Industrialized West	272
A–14a, A–14b.	Romanian Hard Currency Trade and Debt Estimated, 1980–85	272
A–15.	Projected 1985 U.S.-Romanian Trade	273
A–16.	Romanian Oil Trade	273
Figure 1.	Romanian Net Oil Exports	274

SUMMARY

Romania's trade with the West grew rapidly during the 1970's, with imports rising at an average annual rate of 10.7 percent and exports, at 14.5 percent between 1974 and 1980. During this period, Romania pursued a strategy of diversifying its trade, relying more on Western countries and less on its CMEA partners. By the end of the 1970's, however, Romania's growing energy difficulties and dwindling supply of hard currency made expanded trade with Western countries increasingly difficult. Two-way trade with less developed countries, primarily OPEC members, has gained significantly.

---

*The authors would like to thank Mr. Jay A. Burgess and Mr. Edgar D. Fulton, Jr. for their thoughtful comments and criticisms.

Romania's hard currency debt position (net debt totaled about $8.8 billion in 1980) and present financial crisis are largely the result of its deteriorating energy situation and general economic mismanagement. Long a petroleum-products exporter, Romania became a net importer of crude oil in 1976. With crude prices rising faster than the price of refined products. Romania's hard currency earnings from oil products sales failed to offset expenditures for imports. Further, unstable crude oil supplies and rapidly changing conditions on international oil products markets have led to continued hard currency losses for Bucharest's important oil refining industry. Moreover, since joining the IMF and the World Bank in 1972, Romania has made considerable use of the credit facilities of both, thus adding to its overall debt levels.

A continuation of energy and other economic problems into the mid-1980s and uninterrupted access to Western credits would result in an estimated hard currency debt of $21 to $23 billion by end-1985. However, since opening talks on debt rescheduling with Romania in late 1981, Western banks and governments have virtually terminated Romanian credit facilities. This credit cut-off has severely reduced Bucharest's ability to import vital hard-currency goods and, if it continues, can be expected to disrupt a number of Bucharest's key export industries. Consequently, any forecast of likely Romanian trade and debt has become almost impossible, because future Romanian trade and economic performance now hinges upon renewed access to credit. A renewal of credits, however, will require adept Romanian and Western handling of the present rescheduling, radical and effective changes in Romanian economic development strategy, and favorable Western bank reactions to these steps. Therefore, this paper's trade and debt projections no longer depict a likely economic future for Romania, but instead graphically illustrate the direction in which poorly conceived development policies were propelling the Romanian economy.

While the Soviet Union is in a position to help alleviate a number of Bucharest's more serious economic problems, it has consistently chosen not to offer any really significant economic help. Soviet imports of Romanian agricultural products which Romania could sell for convertible currency (especially frozen meats, fresh vegetables and dried fruits) remain high, while low or declining levels of Soviet critical raw material exports (such as crude oil and iron ore) force Romania to make sizeable expenditures of convertible currency.

Projections ranging from 4–9 percent annual growth for exports to the West and 1–7 percent for imports yield 1985 exports of $3.8–$4.8 billion, imports of $3.8–$5.2 billion, and a trade deficit of up to $350 million. Trade with the LDCs—largely hard currency trade with OPEC—is projected to remain in deficits which range from $200 to $600 million. These projections assume that Bucharest can reduce its unprofitable oil products business and make cuts in imports from the West without disturbing valuable export programs. Romanian trade deficits in 1980 were $535 million with the West and probably near $1.6 billion with the LDCs.

The fastest growing category of Romanian exports to the West during 1981–85 may be chemicals, expected to grow at an average annual rate ranging between 20 and 28 percent. Despite their current poor ranking, chemicals exports are likely to respond positively to increased investment and to reductions in import restrictions in the European Community markets. Exports of machinery and transport equipment should grow 14–19 percent annually, while miscellaneous manufactures should follow closely with 11–16 percent average annual growth. Principal products will probably continue to be simple steel forms, textile yarns and fabrics, and sheet glass and glassware.

Romanian imports of fuels are projected to display a rapid growth—between 15 and 20 percent—during 1981–85. These will center on coal, mainly from the United States and the FRG. Miscellaneous manufactures (mainly scientific instruments) are expected to increase by 16–23 percent annually and chemicals (especially pesticides and fertilizers), by 2–8 percent. Depending upon Romania's debt and payments position, imports of machinery and transport equipment (chiefly machine tools for metal) will fall by 2 percent or rise by 8 percent annually.

Romania's trade with the U.S. surged in the late 1970's, especially after the normalization of trade relations in 1975. Romanian exports rose at an average annual rate of 18.6 percent between 1975 and 1980, while imports rose by 30.6 percent. A gross debt of $538 million to U.S. commercial and official lenders by yearend 1980 resulted from a reduction in U.S. imports, especially of petroleum products, and a rapid increase in U.S. exports of agricultural goods.

In 1981, U.S. exports to Romania totaled $503.9 million, while imports from Romania reached $560.1 million. This anomalous situation—a Romanian trade surplus with the U.S.—was largely attributable to an increase in gasoline shipments to the U.S., and a surge in exports of steel plate. (Another partial cause was the Romanian government's policy of sharp restraints on imports from hard-currency areas.) The authors believe it to be unlikely that these increased exports to the U.S. will be sustained.

U.S. exports to Romania could range from an 8-percent annual decline to a 9-percent annual increase, resulting in 1985 exports of $358.2–$717.9 million. Imports from Romania could fall at an average annual rate of 2–12 percent, resulting in imports of $346.7–$522.6 million in 1985. Romania's trade deficit would range from $11.5 to $195.3 million.

Foodstuffs will probably continue to dominate Romania's imports from the United States, comprising 68–76 percent of total imports from the U.S. by 1985 (again, depending on availability of funds). Bucharest will probably continue to need grain, livestock feeds, and soybeans. Another key import category will be crude materials and fuels, especially the latter. Coal will likely continue to comprise the bulk of these imports.

A decline in shipments of steel and gasoline, as well as of clothing, footwear, and other light manufactures to the U.S. will contribute to the continuation of Romania's poor exporting performance.

INTRODUCTION

The Romanian economy differs from the economies of most other East European countries. Namely:

Romania has developing country status;

Romania does not rely on Soviet petroleum supplies; It produces a considerable share of its own needs and imports significant amounts from OPEC;

Until 1980, Romania's GNP showed strong annual growth, posting a 4.5 percent real increase in 1979; and

Romania's foreign economic relations are well diversified, with only slightly less than half of its trade devoted to other socialist countries.

The prospects for slower Romanian economic growth in the 1980's seem increasingly likely. (GNP grew by only 2.5 percent in 1980.) First, Romania became a net importer of oil in 1976. (See Figure 1.) Romanian oil production, no longer able to keep pace with its growing domestic needs, cannot shelter the economy from the hard currency strains of importing expensive foreign oil. Further, since exports of petroleum products now stem almost entirely from imported OPEC oil, Romania no longer enjoys the hard currency windfalls which it enjoyed under earlier OPEC price increases. In fact, international economic conditions have turned Bucharest's oil products trade into a hard currency losing venture—a most serious setback for Romania's long-range economic development plans.

I. ROMANIA'S TRADE OBJECTIVES AND PERFORMANCE DURING THE 1970'S

A. TRADE OBJECTIVES

1. With the West

The watchword for Romanian trade policies throughout the 1970s was "diversification." This slogan was translated by governmental actions into:

Participation in several non-communist international economic organizations (GATT, IMF, and UNCTAD);

Conclusion in 1980 of an agreement with the European Community (EC) on trade in manufactured products; and

Efforts to increase trade with non-CMEA countries.

Through the policy of diversification, Bucharest expected to accelerate its ambitious industrial development plans and establish itself on Western markets.

2. With the United States

The normalization of trading relations was one of Bucharest's primary commercial objectives with the United States during the 1970s. In August of 1975, the United States normalized trade by extending most-favored-nation status (MFN) to Romania. In addition, the United States recognized Romania's status as a developing country, granting duty-free treatment under the Generalized System of Preferences (GSP) to qualifying Romanian exports.

With trade normalized, Bucharest aimed to expand its exports of light (furniture, glassware. shoes, clothing, etc.) and medium manufactures (iron and steel, chemicals, etc.). Furthermore, Bucharest sought to establish itself as an important customer for U.S. goods—especially agricultural products and raw materials.

B. TRADE PERFORMANCE

During the first half of the 1970s, the developed West accounted, at times, for well over 40 percent of Romania's total trade. (See Table

A–1.) Sales to the West of oil and oil products continued to provide substantial earnings of hard currency for Bucharest's energetic program of importing Western goods. During the latter part of the decade, however, Bucharest's trade strategy began to falter. Romanian oil product exports became less profitable—no longer incorporating Romania crude oil—and increasing amounts of expensive imported oil became necessary for Bucharest's domestic needs. Further, exports of non-oil products failed to capture Western markets to the degree needed for a substantial boost in hard currency earnings—growing less than 6 percent annually since 1974. Consequently, the West's share of Romanian trade dropped noticeably (to 36 percent of total in 1979).

After launching the policy to diversify its trading partners, Bucharest's trade with other communist countries was considerably outpaced by the growth of its trade with the rest of the world. The communist countries' share of total Romanian trade dipped from a decade high (49 percent) in 1970 to a low (33 percent) in 1974. By the latter half of the 1970's, however, this trend began to reverse itself. Romania's growing energy difficulties and dwindling supply of hard currency has made expanded trade with the Industrialized Western countries increasingly difficult. At the close of the decade, trade with less developed countries, primarily OPEC members, gained significantly, rising from 13 percent of total trade in 1974 to 22 percent in 1979. Although much of that increase can be directly attributed to the higher cost of oil imports from OPEC, Romanian exports to the Third World have nearly tripled since 1974 (from $667 million to $1.9 billion in 1979).

II. ROMANIA'S HARD CURRENCY DEBT AT YEAREND 1980

A. DEBT GROWTH AND BORROWING STRATEGY

Increased trade with the West was an essential part of Romania's ambitious industrial development plans for the 1970's. Modest hard currency trade deficits and growth in debt were likely viewed as short-run necessities for making the Romanian economy competitive on international markets. However, Bucharest's economic strategy has been frustrated, and the Romanian hard currency debt rose drastically over the past few years. The most important factors triggering Romania's present hard currency crisis are:

Unexpected and drastic increases in the price of imported oil; declining domestic oil production, now below Romania's own needs; lack of reliable foreign oil supplies, often forcing Romania to buy at high spot market prices and thereby reducing earnings on oil product exports; a present glut in international oil product markets, with Romanian oil products probably being sold at prices resulting in net hard currency losses; and continued deficits in non-oil trade with the West.

The changes in Romania's debt (see table A–4) reflect, to a large degree, the interplay of the above factors. The 1973 OPEC price increase evidently created serious cash flow problems for Romania—unexpectedly high oil import bills and the costs of an ambitious import program required the immediate availability of large sums of hard currency. As a result, Romania's commercial debt almost tripled. The following 2 years saw slight improvements in Romania's hard currency situation, as Bucharest began to profit from the higher oil prices and was able to reduce imports of Western goods. However, Romania's own consumption of oil continued to grow rapidly while at the same time its domestic oil production began to drop. When Bucharest no longer could use surplus oil for export and was forced to import oil for its own needs, the financial impact was immediate. Total net debt, conservatively estimated at $8.8 billion for 1980, has increased at an average annual rate of 36.6 percent since 1976.

With earnings from Romania's oil product exports no longer helping to underwrite imports of Western goods and no longer covering all the costs of imported oil, Bucharest has increasingly turned to the West for loans. The need for further Western loans will, to a large degree, depend on how Bucharest solves the following:

Recent unprofitability of its oil refining industry's exports;

The growth of the domestic economy's needs for imported oil;

Its inability to attain a balanced hard currency trade with the West in non-oil products;

Its inability to increase significantly its non-oil exports to the less-developed countries; and

The failure of its agricultural sector to reduce the need for sizable agricultural commodity imports.

B. COMPOSITION OF DEBT

Since the beginning of the 1970's, the composition of Romanian debt has shifted markedly. In 1971, less than 48 percent of Bucharest's gross debt was in the hands of Western commercial lenders, while about 52 percent was in official credits. By 1980, however, commercial loans comprised over 69 percent of gross hard currency debt; official credits, nearly 18 percent; and multilateral credits (IMF and World Bank), over 12 percent. In 1981, the IMF approved the extension of $1.46 billion in both stand-by and balance-of-payments assistance for Romania. Disbursement of these funds are contingent on Bucharest's implementation of an economic stabilization program.

The shift from official to commercial borrowing implies growing debt management problems for Romania, since commercial credits have shorter maturities and higher interest rates than government loans (although, commercial loans are often more readily available, issued in larger amounts, and granted with fewer restrictions on use). In fact, nearly 43 percent of its commercial debt at year end 1980 had a maturity of one year or less. By the third quarter of 1981, this situation had resulted in acute liquidity problems which led to the Romanian request for a partial rescheduling of its debt.

III. ROMANIA'S HARD CURRENCY TRADE OBJECTIVES AND STRATEGY: 1981–1985

Romania's hard currency trade includes not only its sizeable trade with the Industriailized West (see Table A–5), but also part of its rapidly growing trade with the Third World. For example, oil imports account for almost half (45 percent of total trade in 1979) of Bucharest's trade with the LDCs and almost certainly are purchased with hard currency. However, the exact hard currency component of Romania's Third World trade is unknown, making difficult an approximation of the degree to which increased trade with LDCs will affect Bucharest's overall hard currency trade strategy for the 1980's.

The following analysis of Bucharest's hard currency strategy and objectives in trade with the Industrialized West must not be construed as presenting a complete picture of Romania's hard currency situation. Such a picture would necessarily include an analysis of the present and future hard currency components of Bucharest's trade with the LDCs. Instead, the following section describes one important part (over 60 percent of Bucharest's trade with non-communist countries in 1979) of Bucharest's total hard currency trade.

A. OBJECTIVES

Romanian foreign trade objectives in the 1980s will be dominated by Bucharest's need to extricate itself from a difficult hard currency predicament. The latest 1981–85 Plan directives, published in July 1981, attest to the leadership's growing awareness of this need. Many of the growth targets have been revised downward from those originally published at the Twelfth Party Congress in 1979. For example, the range for the increase in national income was reduced from 6.7–7.4 percent to 7.1 percent annually; the rate of growth of industrial production was reduced from 8–9 percent to 7.6 percent annually; and the rate of investment growth was reduced from the 5.4–6.2 percent range to 5.2 percent annually. However, planned growth of agricultural output remained the same (about 4.5–5 percent annually), despite that sector's poor performance in 1980. (These percentage growth figures represent the annualized 5-year increase over 1976–80 levels.)

The Romanian planners have allotted an important role to foreign trade. Total trade turnover is planned to grow at 11.9 percent annually, with exports increasing more rapidly than imports. In order to help enforce these plans, the government in 1980 enacted a law requiring foreign trade organizations (FTO's) to balance their individual hard currency trade. If the FTO does not have sufficient foreign exchange to cover its imports, it must use countertrade arrangements.

Thus, there will be considerable pressure to reduce imports from the the Industrialized West, while expanding exports. Trade data for 1980 give some evidence of progress in this direction (exports to the Industrialized West, at $3.1 billion, were up 6 percent over 1979, while imports, at $3.6 billion, were up only 2 percent). However, the following sectoral analysis of Romania's trade with the Industrialized West strongly suggests that there is a lower limit beyond which Bucharest cannot cut imports without affecting its hard currency export programs. Moreover, if planned conversion and conservation efforts are ineffective, the need to import crude oil will likely continue to hinder plans for reducing the hard currency payments deficit.

B. IMPORT NEEDS

The following is an assessment of Romania's import needs from the Industrialized West for 1981–85. (See Tables A–6 through A–9):

Foodstuffs

Foodstuffs comprise slightly more than 15 percent of total Romanian imports from the Industrialized West. The growth in Bucharest's imports of foodstuffs from the Industrialized West since 1974 (about 23 percent annually) exceeds the growth in Bucharest's overall exports (about 12 percent) of agricultural products during the 1970s. Bucharest's agricultural products exports have increased both to hard currency countries (primarily OPEC) and to other CMEA countries. Severe cutbacks in foodstuff imports are unlikely in the near future, for import reductions would in turn disrupt Bucharest's important export programs. Furthermore, some imports are also vital in alleviating Bucharest's present domestic food supply crisis. A softening in the markets for Bucharest's agricultural exports—especially in hard currency countries—would, however, dampen subsequent Romanian imports of foodstuffs, as would improvements in Romanian agricultural production.

Crude Materials

Romanian imports of crude materials, while only 8 percent of total imports from the Industrialized West, grew rapidly from 1974 to 1979. Much of this growth is due to increased imports of soybeans and soybean products—important for Romanian livestock feed—and is thus tied to continued strength in Bucharest's agricultural products exports. Imports of cattlehides—important for the Romanian shoe industry—also grew strongly during the 1970's. When faced with the recent large price increases in cattlehides, Bucharest reduced the volume of its purchases. A resumption of past volumes of cattlehide imports will depend primarily on Bucharest's success in passing the price increases of this raw material on to its customers and on a continued Western demand for its leather footwear.

Mineral Fuels

The magnitude of oil purchases from OPEC clearly overshadows Romania's fuel purchases from the Industrialized West. However, when imports of expensive OPEC oil became necessary to satisfy domestic energy needs, Bucharest turned to imported Western coal (primarily from the United States and the FRG) as a less expensive energy source. If oil prices remain relatively higher than coal prices and if CMEA countries—mainly Poland and the U.S.S.R.—prove unwilling to increase exports to Romania, Bucharest's coal imports from the West are likely to increase vigorously during the 1980's.

Chemicals

Romanian plans to develop a strong domestic chemical industry have yet to be fully realized. As a result, chemical imports from the Industrialized West grew throughout the 1970's. Future chemical imports from the Industrialized West will likely stagnate or drop as domestic production—primarily petrochemicals and agrochemicals—comes on stream. Nevertheless, the demand for specialty chemicals—especially those related to vital economic programs—can be expected to continue.

Basic Industrial Goods

Basic industrial goods—primarily iron and steel, textiles and nonferrous metals—comprise the second largest group of Romanian imports from the Industrialized West. Many of these goods are directly linked to important hard currency export programs, making prolonged reductions in import levels difficult.

Iron and steel goods are clearly the most important group of Romania's basic industrial goods imports from the Industrialized West. A sizeable portion of Bucharest's iron and steel imports are used by the oil production and refining industries. (Seamless iron and steel tube imports totaled $93 million in 1979; i.e., almost 20 percent of total imports of iron and steel.) While oil production and refining are key industries, imports of seamless pipe proved very sensitive to domestic Romanian economic problems, dropping sharply during Bucharest's hard currency squeeze of 1976. Subsequent growth in the value of imports of Western pipe stems almost entirely from higher pipe prices. A decision to reduce investment in the petroleum refining and petrochemical industries—increasingly likely if the industries continue to be unprofitable—would result in a sharp drop in iron and steel imports from the Industrialized West. In fact, 1980 showed a drop of almost 20 percent in total Romanian iron and steel from the Industrialized West, with imports of seamless iron and steel tubing falling even more (about 25%). Alloy steel bars and ferro-alloys are also important groups (15 and 11 percent, respectively) of Romania's iron and steel imports from the West.

Textile yarn and fabric (primarily non-cotton woven materials) and leather are also important basic industrial goods imports. Both of these import groups are directly tied to hard currency export programs (clothing). Textile imports increased only modestly since 1974 (about 5 percent annually), reflecting Romanian efforts to increase domestic production. The value of leather imports has, however, increased sharply since 1974 (over 19 percent annually), reflecting sharp rises in world market prices. Continued imports of textile and leather will probably depend on Bucharest's ability to increase its foreign market shares of the related finished products, many of which are subject to stringent quotas.

Machinery and Transport Equipment

Imports of machinery and transport equipment are usually the dominant group (about one-third) of total Romanian imports from the Industrialized West. In 1976, however, imports of machinery and transport equipment fell by over 20 percent, to a level below that of the imports of basic industrial goods. Since 1976 was a year of financial austerity for Bucharest, this drop suggests that machinery and transport equipment imports are more susceptible to immediate reductions than are other groups of imports.[1] In fact, Romanian imports of machinery and transport equipment fell precipitously (almost 23 percent) in 1980, suggesting the continued sensitivity of this group of imports to hard currency problems.

Metalworking machine tools and parts imports from the Industrialized West grew vigorously between 1974 and 1975, both in overall value (almost 40 percent annually) and as a share of total machinery imports from the Industrialized West (13 percent in 1974 to 34 percent in 1979). However, in 1980 Bucharest cut imports of metalworking machine tools by over one-half. Since reductions occurred for all important I.W. supplies and for all types of machines, the reductions probably related to a generally austere import policy rather than to specific projects.

---

[1] A signficant share of machinery imports are quite possibly linked to domestic industrial expansion and modernization, rather than to key export industries. Thus, temporary reductions of machinery imports carry smaller short run consequences for the Romanian economy. It is not clear, however, whether such cutbacks could be imposed for longer periods without seriously impairing Romanian industrial development plans.

Pumps for gases and cock and valve imports constitute another major machinery import from the U.S. (over 9 percent of total machinery imports in 1980). However, imports of these items dropped sharply in 1976 and overall growth since 1974 has not kept ahead of price increases. These import statistics suggest that Bucharest's oil and oil refining industries—the primary consumers of this machinery—are not accorded unusual preferences in state import strategies.

Other important machinery imports from the Industrialized West—e.g., textile and leather-working machinery, construction and mining machinery, and piston engines—have failed to grow since 1976. Since Bucharest's hard currency position is expected to worsen, cutbacks in these and other types of machinery, which began in the 1980's, should continue in the near term.

C. CONSTRAINING FACTORS ON ROMANIAN IMPORTS FROM THE INDUSTRIALIZED WEST

A number of factors are likely to cut the growth of Romanian imports from the Industrialized West during 1981–85. The following are the more significent of those factors:

Bucharest's request for a rescheduling has almost completely eliminated its access to any Western credits. The future availability of credits, vital for a smoothly functioning import program, will depend directly on Bucharest's ability to implement an economic stabilization program.

Net losses on exports of Romania's refined petroleum products—the most important Romanian export to the Industrialized West—will seriously reduce the amount of hard currency available for import purchases.

Western import restrictions on many of Bucharest's chief exports—foodstuffs, iron and steel products, chemicals, footwear, and clothing—will limit the growth of hard currency available for import purchases.

Nevertheless, large reductions in Bucharest's imports from the Industrialized West will be difficult, for many major imports from the Industrialized West—e.g., grains, soybeans, cattlehides, textile—are essential raw materials for Romanian hard currency exports—e.g., foodstuffs, shoes, clothing etc. Other imports from the Industrialized West, while important for raising the efficiency of Romanian industry, are also key to hard currency export programs. For example, imports of Western seamless iron and steel tubes, pumps for gases, cocks and valves are used in the Romanian petroleum producing and refining industries, industries which supply both domestic and foreign markets. Many chemicals imported from the Industrialized West are used by the Romanian agricultural and textile industries to produce goods for both domestic consumption and export. Consequently, Bucharest's choices for reduction will reflect changes in hard currency export strategies and decisions to delay industrial investments. Only if under severe financial pressure would Bucharest begin cutbacks in export-related imports.

IV. ROMANIAN HARD CURRENCY EXPORT CAPABILITIES, 1981–85

A. COMPOSITION OF RECENT EXPORTS TO THE INDUSTRIALIZED WEST

Expanded exports to the Industrialized Western countries was an integral part of Bucharest's early program of foreign trade diversification. This program envisioned that exports—primarily refined oil products, petrochemicals, and light manufactures—could generate sufficient amounts of hard currency to support hefty purchases of Western machinery and equipment for its ambitious industrialization goals. While Bucharest seriously miscalculated on the prospects for earnings from oil refining, its exports of basic industrial goods and light manufactures have proven relatively successful. Further, exports of machines, transportation equipment and chemicals, while still at rather modest levels, have grown consistently. Continued growth in some of Bucharest's more successful non-oil manufactures could, however, be severely impaired by the present financial crisis, for a number of these manufactures (e.g., iron and steel, footwear, and non-ferrous metals) are almost entirely dependent on the import of the necessary raw materials. An inability to continue importing raw materials would soon translate into decreased hard currency exports.

The following is an assessment of Romania's export capabilities by major commodity categories for 1981–85 (see Tables A–10 through A–12):

Foodstuffs

While Romanian foodstuff exports to the world grew throughout the 1970s, they declined as a share of total exports (to about 12 percent in 1980). Foodstuff exports to the Industrialized West, however, declined both in total value and as a share (about 7 percent in 1980) of Bucharest's total exports to the Industrialized West. The slowdown in growth of total foodstuff exports probably reflects the recent poor performance of Romanian agriculture; whereas the drop in exports to the Industrialized West is likely due to Bucharest's expanded foodstuff exports to other markets—primarily OPEC and the U.S.S.R.

An increase in Romanian foodstuff exports to the Industrialized West in the 1980s will depend directly on Bucharest's ability to resolve its numerous problems in agricultural production and on the European Community's willingness to remove a number of the stringent quantitative import restrictions on Romanian agricultural products. Romania's recent negotiations with the European Community failed to remove any of the Community's trade barriers on agricultural products. Consequently, Romanian foodstuff exports to the Industrialized West will probably continue to stagnate during the 1980s, with only modest increases likely for the non-European Community markets in the Industrialized West.

Foodstuff markets in the Third World (primarily OPEC) and in other East European CMEA countries will continue to be more open to Bucharest, with the OPEC markets providing sources of needed hard currency.

Crude Materials

Romanian crude materials exports to the Industrialized West continued at relatively modest levels through the 1970s and comprised 4 percent of total Romanian exports to the Industrialized West in 1980. Wood and lumber remained Bucharest's most important crude material exports to the Industrialized West, although stagnating domestic production and declining prices led to a significant drop from the record export levels posted in the mid-1970s. Synthetic rubber is one of a number of fledgling petroleum-based industries built to expand Bucharest's hard currency exports. Romania's synthetic rubber exports to the Industrialized West have increased sharply since 1974, growing at an average annual rate of almost 19 percent. This growth in synthetic rubber exports exceeds considerably the growth in domestic production (9 percent annually) and indicates Bucharest's success on world markets. However, exports of synthetic rubber dropped in 1980, suggesting some vulnerability to Bucharest's oil problems. Textile fibers and waste (primarily synthetic and artificial fibers) comprise Bucharest's third most important crude materials export to the Industrialized West. Domestic Romanian production of synthetic and artificial fibers, after a vigorous growth (16 percent annually) in the first half of the 1970's, has grown only modestly since 1975 (less than 6 percent annually). Textile fibers exports (including synthetic and artificial fibers) to the Industrialized West have, however, grown erratically, with significant annual fluctuations.

Most of Bucharest's major crude materials exports to, the Industrialized West should expand at or near the rates achieved during the 1970's. If domestic production of wood and lumber remains stable, Romanian exports to the Industrialized West will likely stabilize at their present modest levels. The value of Bucharest's synthetic rubber exports to the Industrialized West will probably stagnate, given depressed world prices and Bucharest's probable retreat from Western petroleum product markets. Synthetic and artificial fibers exports should also increase, although Western import restrictions could hamper any real surge. Continued long run growth in exports of textile fibers will also depend on Bucharest's success in achieving planned chemical industry growth and on favorable conditions in world markets. Consequently, Romanian crude materials exports, a relatively small part of Bucharest's total exports to the Industrialized West (4 percent) should, at best, expand moderately from 1981 to 1985.

Mineral Fuels

Petroleum products are Bucharest's most important export (over one-third of total) to the Industrialized West. Since 1974, Bucharest's petroleum products exports have increased at an average annual rate of 23 percent, reflecting largely the rapid rise in crude oil prices. (See Tables A-10 and A-16.)

Profitability will determine the fate of Bucharest's oil products trade in the 1980's. Presently, the Romanian oil refining industry is struggling to overcome outside events which have severely reduced the profitability of its oil exports to the Industrialized West. First, the cut-off in crude oil supplies from Iran and Iraq forced Bucharest to buy oil on the spot market at a time of record spot market prices.

The high cost of spot market oil greatly reduced Bucharest's profit margins for refined products. Second, the subsequent world glut of refined products has now depressed prices to levels which reportedly no longer cover producers' costs. (Major Western oil companies presently report losing about $3 per barrel on refined products. Similar losses for Romanian oil products exports would translate into a daily hard currency drain of about $400,000. Bucharest, however, has not benefited from the long-term supply and delivery contracts held by most major oil companies. Consequently, Bucharest's daily losses are probably greater—perhaps closer to $900,000.) Thirdly, record high interest rates have made the financing of oil purchases increasingly expensive and have further eroded Bucharest's already slim profit margins. Future net hard currency earnings will continue to be limited by Bucharest's relatively weak position in international sales and supply networks.

If conditions on world oil markets remain volatile and unfavorable to small refiners, Bucharest—facing minuscule or even negative profit margins—will probably cut back its participation in the oil products trade in the 1980's. If oil market conditions improve, the value of Bucharest's petroleum product exports to the Industrialized West will probably still remain below present levels, as increased domestic demand cuts into export volumes.

Chemicals

According to the 1976–1980 Five-Year Plan, the chemical industry was to have outpaced all other sectors in production growth. Fertilizer output was to have doubled by 1980, and hard currency exports were to have increased sharply in spite of rising domestic demand. In contrast, chemical exports to the Industrialized West steadily declined in real terms.

Chemicals presently represent the smallest category of Romanian exports to the Industrialized West, 3.6 percent of total in 1980. In fact, the share of chemicals in Bucharest's exports to the Industrialized West has gradually dropped during the 1970's (from 7.0 percent in 1974).

Organic chemicals (of which almost 50 percent were hydrocarbons) are Bucharest's most important chemical export to the Industrialized West, with Italy purchasing the major share. Growth of Romanian organic chemical exports has been erratic—partly due to extensive earthquake damage to chemical plants in 1977. A new petrochemical plant in Midia and the planned modernization and expansion of the Craiova chemical complex should add substantially to Bucharest's export capabilities.

Other important chemical exports to the Industrialized West—nitrogenous fertilizers and plastics—have also performed erratically during the 1970's and have also received considerable investments of capital. Romania's investments in its chemical industry should bear fruit over the next years and substantially add to the exports of hydrocarbons, nitrogenous fertilizer, and polymers.

The 1980's will see many oil- or gas-rich developing countries realize the development of their own petrochemical industries. Given the limited domestic markets of these developing countries for basic petrochemicals, world markets in the 1980's may be inundated by inexpensive basic petrochemicals. Consequently, it is not clear whether the Romanian petrochemical industry, now dependent on expensive foreign petroleum, will be able to compete effectively and realize significant hard currency earnings from exports during the 1980's.

Bucharest's recent negotiations with the European Community could provide an important competitive advantage for expanded Romanian chemical exports. (The agreement with the European Community successfully eliminated the quantitative restrictions on a number of important chemical exports—e.g., acyclic hydrocarbons, hydrocarbon derivatives, insecticides, etc.—and future negotiations could remove the restrictions on other important chemical exports).

Basic Industrial Goods

Basic industrial goods form a large and vigorous component of Bucharest's exports to the Industrialized West, comprising almost one-sixth of total exports in 1980 and growing 15 percent annually since 1974. The future strength of a number of Bucharest's most import basic industrial goods exports to the Industrialized West depends directly on Bucharest's ability to maintain the imports of necessary raw materials.

Iron and steel products have consistently been Bucharest's most important (about one-third of total) basic industrial goods export to the Industralized West. Since 1974, exports of these products (16 percent annually) have outpaced the growth of overall Romanian steel production (7 percent annually), reflecting a substantial effort by Bucharest to develop Western markets for its iron and steel products. Simple steel coils, steel blooms and steel plates account for over half of Bucharest's iron and steel exports.

The growth of Romanian iron and steel production throughout the 1970's depended on increases in iron ore imports, for domestic iron ore production decreased during the 1980's. Further, Romanian imports of iron ore from the Soviet Union dropped both absolutely (from 6.3 million tons in 1975 to less than 4.2 million tons in 1980) and as a proportion of total iron ore imports (from 58 percent in 1975 to 26 percent in 1980). Thus Bucharest has increasingly relied on non-CMEA sources for the major share of its iron ore imports. While a number of Bucharest's present suppliers of iron ore (e.g., India) are LDCs and may use clearing, barter or other non-monetary forms of conducting foreign trade, a future lack of suitable Romanian exports for barter or continuing hard currency difficulties could slow down iron ore imports and thus the growth of Bucharest's steel industry during the early 1980's. Given an uninterrupted supply of iron ore, the achievement of rated capacity by the recently opened Galati works, and no new strong protectionist measures by the EC or the United States (such as the antidumping case initiated by the U.S. Department of Commerce against carbon steel plate imports), Romanian iron and steel exports to the Industrialized West could continue to grow at or near the vigorous level recorded during the 1970's. Further, Bucharest's broad geographic marketing efforts could help Romania avoid major setbacks in its iron and steel export programs.

Textile yarn and fabrics emerged as Bucharest's second most important (16 percent of total) basic industrial goods exports to the Industrialized West, with no one subcategory of these goods predominating.

Exports of textile yarn and fabrics to the Industrialized West have expanded strongly since 1974 (13 percent annually), at a slightly greater rate than the Industrialized West's overall increase in imports (11 percent annually) of these goods during the same period. Bucharest's market share for textile yarn and fabrics in the Industrialized West, while remaining under 0.5 percent, varied considerably during the latter part of the 1970's and has dropped from its high in 1976. Textile yarn and fabrics are also subject to numerous Western import restrictions and a continued expansion of Romanian exports of these goods could—in addition to the effects of domestic supply constraints—be dampened by trade barriers. Thus, Bucharest's exports to the Industrialized West of textile yarn and fabrics will probably grow considerably more slowly during the 1980's than they grew over the past decade.

Non-ferrous metals, 85 percent of which are unwrought aluminum alloys and aluminum plate, comprise another important category (about 15 percent of total) of Romanian basic industrial goods exports to the Industrialized Western countries. While aluminum production rose throughout the 1970's, the quantity of aluminum exported, both to the world and to the Industrialized Western countries, has shown no growth since the mid-1970's. During this period the value of aluminum shipments to the Industrialized West did, however, increase at an average annual rate of 11 percent—reflecting the general rise in world prices and a greater share of the more extensively processed aluminum plate in Bucharest's aluminum exports.

While expansion of the Slatina plant has continued and could permit an expansion of aluminum exports in the 1980's, Bucharest's export prospects for aluminum will primarily depend on its ability to increase its imports of bauxite. Bucharest's energetic involvement in trade with the Third World has included development projects for bauxite mining, which could provide Bucharest with the stable source of supplies it needs for continued exports to the Industrialized West in the 1980s. In addition, the recently negotiated agreement with the European Community removed the quantitative restrictions Italy had imposed on many Romanian aluminum exports.

Glass, another important Romanian basic industrial export to the Industrial West, was also recently removed from the European Community quota list. Thus, exports of Romanan glass to the Industrialized West could grow considerably over the next decade.

Machinery and Transport Equipment

Machinery and transport equipment are a small (6.6 percent of the 1980 total) and relatively stable share of Bucharest's exports to the Industrialized West.

Non-electric machinery was consistently the most important category of Romanian machinery exports to the Industrialized West and comprised almost half of Bucharest's machinery and transport equipment exports in 1980. Since 1974, these exports have outperformed the overall growth of Bucharest's non-oil products exports to the Industrialized West, growing at an average annual rate of 19 percent.

Tractors, metalworking machine tools, and ball and roller bearings account for the vast majority of Romanian non-electric machinery exports to the Industrialized West. Tractor exports to the Industrialized

West have grown very little since 1975. Further, domestic production of tractors dropped to 7 percent per annum in the second-half of the 1980s after having grown more rapidly (11 percent) during the first half, possibly suggesting that tractor exports during the 1980's will likely be limited by domestic capacity constraints. On the other hand, exports of Romanian metalworking machine tools, while stagnating to the rest of the world, grew vigorously to the Industrialized West (almost 26 percent per annum since 1974). Domestic machine tool production has grown consistently since 1970 (about 15 percent annually) and probably can continue to supply increased numbers of machine tools for export to the West. Ball and roller bearings exports to the Industrialized West and, to a lesser degree, to the rest of the world have expanded rapidly since 1974 (an average annual growth of 50 percent). Domestic production grew less spectacularly (8 percent annually), suggesting that Bucharest is targeting most of its new production for export.

While Bucharest's most important non-electric machinery exports to the Industrialized West grew vigorously throughout the 1970's, these exports penetrated only a few Western markets. In fact, exports to the United States accounted for almost one half of Bucharest's most important non-electric machinery exports to the Industrialized West. Consequently, a further growth of these exports in the 1980s will require either continued U.S. and, to a lesser extent, West German demand, or a broader Romanian marketing effort.

Bucharest's transportation equipment exports to the Industrialized West are dominated by two products: railway vehicles and motor vehicle parts. Exports to the Industrialized West have increased greatly over the past two years. Bucharest's exports of railway vehicles have been almost entirely to the United States. Consequently, continued exports to the Industrialized West will probably depend on further U.S. purchases. Exports of motor vehicle parts are a result of a Romanian joint venture with Citroen. This joint venture provided modestly increasing (averaging 8 percent annually) exports up to 1979, but declined with the present softness in world automobile markets.

Miscellaneous Manufactured Goods

Miscellaneous manufactured goods are Romania's largest ($729 million in 1980) and most rapidly growing (19 percent per annum since 1974) category of non-petroleum exports to the Industrialized West.

Clothing consistently accounts for over one-half of Bucharest's miscellaneous manufactured goods exports to the Industrialized West and has grown at a strong pace since 1974 (19 percent annually). Bucharest's clothing exports are spread among a number of the Industrialized Western countries, suggesting a successful marketing program and broad acceptance.

While the domestic production of wood furniture grew 7 percent annually through the latter half of the 1970's, Bucharest's exports to the Industrialized West expanded at a considerably quicker pace (almost 20 percent annually). Since furniture exports went primarily to France and the FRG, a further expansion of exports in the 1980's will depend on continued French and German demand or a broader marketing effort by Romanian FTOs. While Bucharest had sought the removal of quantitative import restrictions on its furniture exports to the European Community only the United Kingdom responded.

Romanian leather footwear exports—primarily to the United States, FRG and France—expanded rapidly (21 percent annually) during the latter half of the 1970's. The recent dramatic increases in the price of cattlehides have pushed leather footwear prices higher, reducing demand as consumers switch to popular non-leather footwear. Since most of the cattlehides used by the Romanian footwear industry are imported, Romanian industry can keep footwear prices down only at the expense of its own hard currency earnings. Consequently, with continued high cattlehide prices, leather footwear exports to the Industrialized West will likely stagnate in the 1980's. In fact, Romanian exports of footwear to the Industrialized West grew by only 7 percent in 1980, the slowest growth yet recorded.

Most of Bucharest's miscellaneous manufactured goods exports are subjected to a number of Western non-tariff import barriers. Consequently, continued growth of these goods to Western countries will depend on favorable trade negotiations in the 1980's. Romania's recent agreement with the European Community, if expanded and followed by similar agreements with other Industrialized Western countries, could provide Bucharest with the needed help for further increases in its most successful category of exports to the West.

B. FUTURE PROSPECTS

Total Romanian exports to the Industrialized Western countries are projected to grow at an average annual rate of 4 to 9 percent during 1981–85 (see Table A–13), a pace considerably below the average growth recorded in the 1974–80 period (14.5 percent). The following general factors will probably contribute to this slowdown in Bucharest's exports to the Industrialized West:

Exports of Romanian oil products, which accounted for slightly more than 3 percent of the growth of Bucharest's exports to the Industralized West, are expected to decline;

The future growth of a number of Romania's more rapidly growing exports may be limited by Western non-tariff restrictions; and

Bucharest's hard currency shortages could force reductions in the imports of products key to a number of important export industries.

Table A–13's higher projection (9 percent) for the growth of Bucharest's exports to the Industrialized West assumes more favorable conditions for a number of important export categories. Specifically, if Bucharest is able to negotiate with the European Community for larger quotas on a number of its light manufactures and if the demand for leather footwear remains strong, exports to the Industrialized West of Romania's miscellaneous manufactures could continue at a brisk pace. Further, if the broad geographic distribution of Bucharest's chief iron and steel exports are indicative of a strong marketing program, the exports should be able to weather any temporary softness in individual Western markets. A strengthening of oil products markets could permit a more gradual Romanian withdrawal from oil refining and ease the loss of exports expected to occur in the 1980s.

While stronger than average growth in machinery and transport equipment, chemicals, and crude materials seems likely (see previous section), the relatively small size of these exports minimizes their effects on total export growth.

The lower projection (4 percent) for the growth of Bucharest's exports to the Industrialized West presents less sanguine conditions for the growth prospects of several of Romania's important export categories. This projection assumes that Romanian oil products remain uncompetitive on world markets—Romania will not be able to finance long-term losses from its oil product exports and new OPEC refineries scheduled for operation in the early 1980's will be too powerful competitively. Thus, by 1985 Romania will have cut oil product exports by almost $300 million. Further, Western protectionism on a number of products—clothing, footwear, iron and steel, aluminum, and ball and roller bearings—is assumed to remain strong and restrict the rates of growth in the export of these products.

The above trade projections assume continued Romanian access to hard currency credits. After Romania entered talks on debt rescheduling, its access to Western credits almost completely disappeared. Future access to credits will depend on Bucharest's ability to implement a realistic economic stabilization program. Consequently, this paper's trade projections only serve to illustrate the unsustainable nature of past Romanian economic polices, for future Romanian economic performance will now depend greatly on the outcome of rescheduling and on changed economic policies.

V. ROMANIAN HARD CURRENCY TRADE AND DEBT OUTLOOK 1981–85

For most East European countries trade with the Industrialized West is conducted almost entirely on a hard currency basis, and trade with LDCs, while also involving hard currency transactions, is often conducted through clearing accounts, barter and compensation arrangements. Romania's hard currency trade includes not only its sizeable trade with the Industrialized West, but also an unusually large part of its rapidly growing trade with the LDCs. This difference between Romania and the other East European countries is due to Romania's far greater purchases of oil from the LDCs, oil generally being traded for hard currencies. (During the 1970's oil purchases consistently accounted for over half of Bucharest's imports from the LDCs. Romania is also selling increasing amounts of oil products to the LDCs, with oil-product exports to the LDCs possibly exceeding Romania's other exports in 1980.) Consequently, in analyzing Bucharest's hard currency trade and debt, trade data for both the Industrialized West and the LDCs are combined.

Tables A–14a and A–14b present the hard currency debts which result from a number of assumptions about the structure and development of Romanian hard currency foreign trade during 1981–85.

First, the growth of Romanian trade through 1985—high and low rates—is estimated. This estimate combines the projections for the growth in Bucharest's trade with the Industrialized West (see Table A–13) with projections for the growth of Bucharest's trade with LDCs—both oil (using Table A–13's assumptions of a 5 to 10 percent decrease in imports) and non-oil.[2] Second, estimates of Bucharest's 1980 trade (using OECD data for the Industrialized West and IMF data for Romania's oil trade) levels are made. Third, these estimates of trade levels and growth are combined with Bucharest's approximate yearend hard currency debt, and an arbitrary interest rate—a rather modest 10 percent—is used to calculate the cost of the interest on the debt.

Both estimates project a substantial debt for Romania by yearend 1985—$21.3 and $22.8 billion. Further, the estimate which assumes the larger reduction (10 percent) in Romanian oil trade, in addition to producing the smaller debt and a negative import growth (3.7 percent), almost balances trade by 1985. Nevertheless, while the decreasing trade deficits projected in both estimates are able to slow the growth of Bucharest's debt (from 30 to 12 percent and from 33 to 18 percent), the required growth of debt/exports to balance accounts remains large ($1.9 and $2.3 billion).

VI. U.S.-ROMANIAN TRADE UNDER NORMALIZED CONDITIONS

A. BASIC CONSTRAINTS ON U.S.-ROMANIAN TRADE

Few legal restrictions exist on trade with Romania. Most-favored-nation tariff status was granted for the first time in 1975 and has been renewed annually since then. In addition, since 1976 Romania has been eligible under the Generalized System of Preferences for duty-free treatment for some of its exports to the U.S.

Existing restrictions on U.S. exports to Romania derive from the Export Administration Act of 1979 and the corresponding Export Administration regulations. Under these regulations, Romania is classified separately from the U.S.S.R. and the other East European countries as a "Group Q" country. This means that a validated license from the Department of Commerce is required for export of certain high-technology commodities and technical data from the customs territory of the United States.

Restrictions on imports are based on economic rather than political considerations and consist mainly of quotas and voluntary restraints on Romanian exports of commodities which compete with highly import-sensitive sectors of U.S. industry.

The most formal arrangements are on textiles and apparel, which are covered by two bilateral agreements, one for cotton and one for wool and man-made fibers. Both are comprehensive and provide for consultations should Romania wish an increase in the limits for specific items. Both agreements are renewable at 5-year intervals. The cotton agreement expires in December 1982; the wool/man-made fiber agreement was renewed in April 1981. Other sensitive-sector commodities, such as glass, glassware, and certain steel products, are not covered by any agreements. However, disruptive imports can be handled by Section 406 of the Trade Act of 1974 (market disruption by communist countries), while unfair trade practices resulting in rapidly increasing imports are covered by normal escape-clause and anti-dumping procedures.

---

[2] The projected rate for non-oil trade was 10.5 percent. This rate may be optimistic. Interestingly, Bucharest's exports to its main OPEC trading partners grew at an average rate of only slightly less than 3 percent during 1975–79; whereas, total imports for these countries grew at an average of almost 20 percent annually.

B. COMPOSITION AND VOLUME OF U.S. EXPORTS TO ROMANIA

Agricultural products have dominated U.S. exports to Romania for a number of years, growing at especially rapid rates in 1979 and 1980. Foodstuffs exports (SITC 0, 1, and 4) grew at an average annual rate of 23.7 percent between 1974 and 1980. However, these exports registered a slight decline in 1981.

Exports of manufactured goods have been less important by comparison in U.S. trade with Romania. The value has fluctuated irregularly from year to year, while the share has ranged from 10 to 40 percent of total U.S. exports to Romania between 1974 and 1981. The sale of an airliner in 1980 gave a 34-percent boost to U.S. manufactures exports, but without that sale, there would have been no real growth; and in 1981 Romanian imports of U.S. manufactures dropped 62 percent.

The fastest growing U.S. export was mineral fuels (SITC 3), the value of which increased at an average annual rate of 56.6 percent during the 1974–80 period but fell nearly 50 percent in 1981.

Foodstuffs

Foodstuffs (SITC 0, 1, and 4) exports to Romania reached $335.3 million in 1981 (66.5 percent of total U.S. exports), representing an average annual increase of 20 percent since 1974. Over 93 percent of these agricultural exports consisted of corn ($226.1 million) and soybean oilcake ($86.7 million), both of which have been important export items to Romania throughout most of this period. Other significant exports and their 1981 values included wheat ($8.4 million), cigarettes ($7.0 million), eggs ($2.7 million), and beans for sowing ($1.4 million).

The outlook for continued expansion of U.S. agricultural exports to Romania remains clouded. The country's agricultural output actually fell by 5 percent in 1980. However, Romania's present lack of hard currencies could force cutbacks in agricultural imports even in the face of shortfalls in domestic production.

Crude Materials

One of the most dynamic categories of U.S. exports to Romania in the 1974–79 period, growing at an average of 22.6 percent annually, was crude materials (SITC 2). In the 1979–81 period, however, the dollar value of this category fell 37 percent annually, to $75.5 million (15 percent of U.S. exports to Romania in 1981).

The chief commodities have remained nearly the same since the mid-1970s. This is largely the result of Romania's export development program, which relies on imports of raw materials to produce finished goods for export. Hence, major import items from the U.S. include cattlehides ($22 million in 1981) and wood pulp of various grades ($5.3 million). Other imports of crude materials serve the needs of domestic production: soybeans for animal feed ($17.9 million), phosphates for fertilizers ($6.4 million), sulfur ($22.1 million) and neoprene rubber ($1.0 million) for other manufacturing sectors.

The impressive growth rates of U.S. crude materials exports in the past indicate the importance of these products to the Romanian economy. Nonetheless, as the credit situation worsened in 1981, imports of these products underwent sharp cutbacks. Further reductions seem likely in the future, even though (unless alternate soft-currency or LDC suppliers can be found) such reductions will necessitate changes in Romania's export production structure and plans.

Machinery and Transport Equipment

At $29.5 million, U.S. exports of machinery and transport equipment (SITC 7) represented 5.9 percent of total U.S. exports to Romania in 1981. Exports of SITC 7 have fluctuated erratically since 1974, reflecting the one-time nature of many Romanian purchases. Exports had been falling at an annual rate of about 1.5 percent between 1974 and 1979, but they jumped nearly 18 percent in 1980, due solely to the sale of an airliner. In 1981, they declined by two-thirds. Important items in 1981 included parts for ADP machines ($3.8 million), parts for oil and gas field equipment ($2.6 million), parts for glassworking machinery ($1.8 million), and aircraft parts ($1.3 million).

Prospects for U.S. exports of heavy machinery through 1985 are not bright. The financing situation and Romanian demands for countertrade arrangements pose problems. In addition, factors such as the greater familiarity of other suppliers (such as the FRG) with the Romanian market will tend to work against increases in U.S. sales of heavy manufacturers. Any new Romanian purchases will depend on the hard-currency situation and continue to reflect individual contracts in sectors the leadership regards as high-priority; e.g., any energy-related equipment and technologies, such as coal mining and oil drilling machinery, nuclear-reactor components, and geophysical exploration equipment; plant and equipment for the production of computer peripherals, semiconductors, and other electronic products; plant and equipment for the metallurgical and chemical industries; and agricultural machinery such as harvesters, sprayers, and livestock-breeding equipment.

Mineral Fuels

U.S. exports of mineral fuels and related products (SITC 3) exhibited the most rapid growth of any export sector, until 1981. Their value soared from $5.5 million in 1974 to $81.2 million in 1980, but fell nearly 50 percent, to $41.1 million, in 1981. Their share likewise decreased from 11.3 percent in 1980 to 8.2 percent in 1981.

Throughout the 1974–81 period, bituminous coal has been the primary component of U.S. fuels exports to Romania, increasing in value from $5.5 million in 1974 to $81.2 million in 1980. In 1981, however, coal exports declined to $40.9 million.

Despite Bucharest's $1 billion contract with a U.S. coal supplier, under which shipments of metallurgical-grade coal were to total approximately 400,000 tons annually, Romanian imports of U.S. coal seem likely to continue their decline.

Basic Industrial Goods

Basic industrial goods (SITC 6) have not been a major category of U.S. exports to Romania, accounting for 2.1 percent of 1981 exports (down from 3.9 percent in 1974). During the 1974–79 period, the value averaged about $10.8 million. In 1980 it jumped to $25.3 million but returned to the period average in 1981.

In the past, most exports in this category have been iron and steel products. In 1981, however, iron and steel exports totaled less than $400,000. The largest items in 1981 were pneumatic tractor tires ($4.1 million), unwrought magnesium ($1.4 million), and platinum ($1.1 million).

As with U.S. exports of heavy manufacturers, basic industrial goods seem likely to remain at a low level, with an occasional large purchase of items needed for specific projects. Again, EC suppliers are likely to have a competitive edge over those from the U.S.

Miscellaneous Manufactured Goods

Exports of miscellaneous manufactures (SITC 8) accounted for around 2 percent of U.S. exports to Romania throughout the 1974–81 period. The single most important product category was, and will probably continue to be, scientific and professional instruments. The value of instrumentation sales ranged from $5 to $7 million between 1974 and 1979, increasing sharply to $11.5 million in 1980, and declining again in 1981, to $3.4 million. Principal items in this category in 1981 were geophysical exploration equipment, materials testing equipment, and vacuum control industrial process instruments.

The types of instruments Romania has purchased to date are required for high-priority sectors of the economy: Geophysical exploration equipment aids in the search for more oil, while materials testing equipment is necessary for quality control in Romania's export industries. Thus, prospects for expanded U.S. exports will depend on Romania's ability to pay for them, either with hard currency or through countertrade arrangements, rather than on the level of its demand.

C. ROMANIAN EXPORTS TO THE UNITED STATES

1. *Composition and Volume*

From 1974 to 1978, U.S. imports from Romania grew at an average annual rate of 30.3 percent. This growth resulted from (1) increasing prices for Romania's petroleum products, and (2) the granting of MFN (1975) and GSP tariff treatment (1976) for selected Romanian manufactures. However, from 1978 to 1980, imports declined an average of 5.1 percent per year. This decline appeared to be largely the result of a drop in petroleum products imports and a leveling-off of the MFN-induced trade surge of the mid-1970s. Data for 1981, however, indicate an upsurge in Romanian exports to the United States, an increase of some 79 percent over 1980. A closer examination of these imports reveals that the greatest increases have appeared in steel plate—now the subject of an anti-dumping investigation—and gasoline, quantities of which were apparently shifted to the United States from Romania's regular markets.

Miscellaneous Manufactured Goods

From 1974 until 1978, Romanian exports of miscellaneous manufactures to the United States increased steadily by 54 percent annually, increasing their share from 14.7 percent to 31.3 percent. However, the 1980 total of $91.6 million represented an annual decline of 8 percent since 1978. In 1981, the total stood at $108.4 million, slightly higher than in 1979.

Principal commodities exported in 1981 were nonrubber footwear, especially leather work shoes; clothing; and furniture and parts. Many of these items received highly favorable tariff treatment after the implementation of MFN (*see* table 1), and between 1975 and 1978, U.S. imports increased accordingly: footwear by 61.9 percent annually, clothing by 134.5 percent, furniture by 81.1 percent, and light manufactures as a whole by 91.7 percent.

The declines between 1978 and 1980 have been largely the result of a decrease in clothing imports, which fell by $17.2 million since 1978. While the exact reasons for the decline are unclear, problems of quality and style, the filling of some textile import limits, and possible diversion to other purchasers probably all played a role.

Such reasons are likely to contribute to a continued decline of U.S. light manufactures imports through 1985. Footwear and clothing alone constituted 78.8 percent of light manufactures imports in 1981; with both items particularly vulnerable to import limits and quality considerations, any growth in other light manufactures exports may not be able to offset declines in these two important items.

Machinery and Transport Equipment

Romania's exports of machinery and transport equipment, while growing more slowly recently, have nevertheless registered some impressive gains. From $8.6 million (6.6 percent of Romanian exports to the United States) in 1974, they increased ten-fold to a total of $90.8 million (16.2 percent of total in 1981. The top commodities in 1980 were railway cars and parts ($21.8 million); pumps for liquids ($17.9 million); and agricultural tractors ($10.5 million).

Given the typical Romanian emphasis on production of heavy industrial equipment, this export sector is likely to do fairly well in the near future, provided U.S. demand conditions remain favorable. (For example, the U.S. did not begin importing railway cars from Romania until 1979, when a sudden change in domestic economic conditions necessitated an increase in the supply of rolling stock.) However, should any product sell too well on the U.S. market in times of high unemployment, protectionist pressures may arise in sectors where they have not existed before.

Basic Industrial Goods

Romanian exports of basic industrial goods grew from $6.1 million in 1974 to $171.8 million in 1981, an average annual increase of 61 percent. The share of these goods in total Romanian exports grew from 4.7 percent in 1974 to 30.7 percent in 1981.

Three commodity groups formed the bulk of U.S. imports throughout the entire period: iron and steel products, nonmetal mineral manufactures (primarily glass), and textiles. Within these groups, the principal items and their 1981 values were steel plate ($87.8 million); oilwell casing ($15.0 million); carpets ($6.9 million); and glass tumblers ($5.6 million).

Prospects for increased Romanian exports of these products are mixed. Import restrictions (e.g., if a finding of dumping is made in the current steel plate case) may hinder expansion in each of these areas, as would Romanian production difficulties (especially in steel). However, if additional import restrictions are not applied, Romanian products may exhibit some growth through price advantages and through their ability to capture specific segments of U.S. markets; for example, household glassware and Oriental carpets.

Mineral Fuels and Related Products

In 1974, petroleum and petroleum products (SITC 33) constituted Romania's single largest export to the U.S., with a value of $80.2 million and a share of 61.4 percent. The value of petroleum products exports reached $95.2 million in 1978, falling to $44.5 million in 1980 but rising again in 1981 to $149.1 million. Gasoline imports, which tapered off after 1978, resumed vigorously in 1981, reaching $90.2 million. However, this sudden upsurge appears to reflect a shift of exports into the U.S. market from other markets (and thus an attempt to increase dollar earnings), rather than an increase in capacity. Other important products have been naphthas from petroleum ($50 million in 1981) and light fuel oils ($8.9 million).

Romania will probably not be able to rely on the sale of petroleum products to the U.S. for hard currency earnings as it did in the early 1970s. Exports in this category (notwithstanding the 1981 surge) should continue to decline through 1985 and beyond.

2. *Impact of MFN and GSP*

Romania was granted MFN tariff treatment in 1975. Every year, however, the President must request that Congress renew his authority to waive Section 402 (the Jackson-Vanik amendment) of the Trade Act of 1974, which links MFN to freedom of emigration from communist countries. To date this authority has always been granted.

In 1976 some Romanian goods became eligible for GSP treatment, which is accorded to developing countries in order to help build up their fledgling export industries.

The granting of MFN and GSP had a significant impact on the growth of U.S. imports from Romania: between 1975 and 1976, these imports rose by 49 percent; from 1975 to 1978, the average annual growth rate was 37.5 percent. Table 1 indicates the change in duty rates under MFN for some of Romania's chief exports to the U.S.

Since 1978, however, following the growth period, U.S. imports from Romania have been falling at an average annual rate of 5 percent. Crude materials, fuels, basic industrial goods, and light manufactures all posted declines between 1978 and 1980. Imports of many of the goods listed above which benefited most from MFN declined markedly since 1978. Glass (SITC 664) fell from $7.8 million to $4.7 million (40 percent), steel products (SITC 673–5, 678) fell from $26.8 million to $22.1 million (17.5 percent), and total clothing (SITC 84) fell from $56.8 million to $31 million (45 percent). Thus the trade creation effects of MFN and GSP appear to have lasted no more than a few years.

3. *Impact of Romanian Imports on Sensitive U.S. Industries*

Many of the products Romania exports to the U.S. compete with import-sensitive industries in the U.S. As indicated above, some of these commodities are covered by formal or informal agreements restraining Romanian export growth. In other cases (as with steel plate), an unusual influx of imports can be handled by normal anti-dumping procedures. However, the Romanian market shares of total U.S. imports of these products have been small and, in many cases, are shrinking further. Romanian clothing exports (SITC 84) peaked at 1 percent of U.S. imports in 1977 and 1978; in 1980, the share had fallen to 0.5 percent. U.S. imports of steel bars, sheets, strip, and pipes and fittings (SITC 673–5, 678) from Romania have never in the past six years accounted for more than 0.4 percent of total U.S. imports of these products. Even for commodities in which the Romanian market share is increasing, that share was still quite small; e.g., glassware (SITC 665), 3.7 percent; semi-manufactured glass (SITC 664), 1.7 percent; and footwear (SITC 851), 1.4 percent.

D. GENERAL ASSESSMENT OF U.S.-ROMANIAN TRADE COMPLEMENTARITY

Trade complementarity—i.e., the match between a country's import needs and the commodity composition of a trading partner's exports—exists between the U.S. and Romania, but only within certain limits.

Complementarity exists across sectors. Thus, the U.S. exports primary products (foodstuffs, crude material such as cotton and hides, and coal) in exchange for manufactured items (shoes, clothing, glassware, railroad cars, and tractors).

Within the manufactured sector, there is also a degree of complementarity. U.S. manufactured exports to Romania consist more of capital-intensive, technically advanced equipment, while Romanian manufactured exports to the U.S. are concentrated in consumer goods, which tend to be labor intensive and to require fairly standardized production processes.

However, the extent of both of these types of complementarity is limited. Problems of quality and servicing, as well as competition with other foreign and domestic suppliers within the U.S. market, decrease the likelihood that Romania will be able to continue steadily to expand its exports to the United States.

VII. LEGISLATIVE FRAMEWORK FOR COMMERCIAL RELATIONS WITH ROMANIA

U.S.-Romanian commercial relations are conducted within the framework of a bilateral trade agreement. First signed in 1975, the agreement is renewable every three years in accordance with Section 405(b)(1) of the Trade Act of 1974. The trade agreement provides for extension of MFN, renewable annually (see Section VI.A) and authorizes Export-Import Bank and Commodity Credit Corporation (CCC) credits to Romania. For the U.S. the agreement facilitates business contacts, protects patents and trademarks, and contains a safeguard clause (never yet invoked) against injurious imports.

The existence of the bilateral trade agreement suggests that U.S.-Romanian commercial relations are virtually normalized already. The Romanian government would prefer a permanent trade agreement with permanent (or at least multiple-year) MFN. However, such a change would require the amendment of Sections 402 and 405 of the Trade Act.

VIII. PROJECTED 1985 U.S.-ROMANIAN TRADE UNDER ALTERNATIVE SCENARIOS

U.S. trade with Romania will probably grow more slowly over the next five years than in the preceding period. Factors likely to inhibit the growth of U.S. exports include the following:

The hard currency earnings situation. Despite the Romanian trade surplus with the U.S. in 1981, Bucharest will likely continue to suffer from foreign exchange shortages due to deficits on its other trade and the need to service existing debt.

Lack of availability of U.S. export credits. U.S. lenders are not extending credits to Romania while the rescheduling is proceeding.

The possibility that Romania's hard currency difficulties will cause it to turn more toward CMEA and LDC trading partners in the future.

Factors likely to contribute to slower growth of U.S. imports include:

Renewed reduction in imports of Romanian petroleum products, as shipments are shifted to other markets;

Market disruption actions on the part of the U.S., due to the sensitive nature of Romania's fastest growing manufactured exports;

Possible decreases in Romanian production for export, due to a policy of curtailing raw materials imports.

The following projections for U.S.-Romanian trade, like those for Romania's trade with the I.W., must be taken advisedly, given the need for debt rescheduling.

U.S. exports to Romania are projected either to grow at an average annual rate of 9 percent or to decline by 8 percent annually during 1981–85 (see Table A–15). This range is well below the 1975–80 average growth rate of 30.6 percent. The high-range projections assume continued increases in agricultural exports, financed by commercial or IME borrowings. The lower estimates assume that fewer such credits will be available, and that Romania's food needs will either be met from other sources or left unfilled.

Romanian exports to the U.S. will probably continue their recent pattern of low or negative growth, declining at an average annual rate between 2 and 12 percent through 1985. This compares with a 1975–80 average annual growth rate of 18.6 percent. The high-range estimates assume that no additional protective measures will be taken against Romanian products, and that Romanian export production will decline only marginally. The low range projections assume greater protectionism; interruptions in raw materials supplies, leading to reduced output; or both.

TABLE A–1a. U.S. TARIFF RATES ON SELECTED ROMANIAN EXPORTS

Product	Non-MFN	MFN
Leather work shoes	20 percent ad valorem	17¢/pair-17 percent ad valorem.
Women's/girls' outerwear	90 percent ad valorem	35 percent ad valorem.
Glass, semimanufactured [1]	1.5¢/lb.—60 percent ad valorem	0.2¢/lb.-16 percent ad valorem.
Glassware [1]	50–60 percent ad valorem	9.4–47 percent ad valorem.
Steel plates, sheets	0.2¢/lb.+20 percent–33 percent ad valorem [2]	7.5–10 percent ad valorem. [2]
Steel hoop, strip	25 percent ad valorem	9.5 percent ad valorem.
Steel pipes, fittings [1]	1–45 percent ad valorem. [2]	0.1¢/lb.-13 percent ad valorem. [2]

[1] Some items in the category are eligible for GSP treatment.
[2] Plus additional duties.

Source: Tariff Schedule of the U.S. Annotated, 1981.

TABLE A-1b. ROMANIA'S FOREIGN TRADE

[Dollar amounts in millions]

	1960	Percent of total	1970	Percent of total	1974	Percent of total	1978	Percent of total	1979	Percent of total	1980	Percent of total
Total imports (f.o.b.)	$648	------	$1,960	------	$5,111	------	$8,926	------	$11,168	------	(1)	------
of which:												
U.S.S.R.	266	41.0	501	25.6	744	14.6	1,436	16.1	1,641	14.7	$2,080	15.2
East Europe	173	26.7	441	22.5	865	169	1,856	20.8	2,137	19.1	(1)	------
Developed countries	155	23.9	786	40.1	2,529	49.5	3,499	39.2	3,987	35.7	4,225	35.7
Less developed countries	20	3.1	117	6.0	603	11.8	1,521	17.0	2,636	23.6	(1)	24.3
Total exports (f.o.b.)	717	------	1,851	------	4,840	------	8,093	------	9,949	------	(1)	------
of which:												
U.S.S.R.	281	39.2	529	28.6	808	16.7	1,425	17.6	1,687	17.0	2,275	16.6
East Europe	189	26.4	395	21.3	915	18.9	1,893	23.4	1,879	18.9	(1)	------
Developed countries	154	21.5	622	33.6	2,095	43.3	2,641	32.6	3,592	36.1	4,100	35.5
Less developed countries	40	5.6	153	8.3	667	13.8	1,453	18.0	1,930	19.4	(1)	19.5
Trade balance	+69	------	−110	------	−271	------	−833	------	−1,219	------	(1)	------
with:												
U.S.S.R.	+15	------	+88	------	+64	------	−11	------	+46	------	+195	------
East Europe	+16	------	−46	------	+50	------	+37	------	−258	------	(1)	------
Developed countries	−1	------	−164	------	−434	------	−858	------	−395	------	−125	------
Less developed countries	+20	------	+36	------	+64	------	−68	------	−706	------	(1)	------

[1] Not available.

Source: CIA, Handbook of Economic Statistics, (ER 79-10274), October 1980.

TABLE A-2.—ROMANIA'S HARD CURRENCY TRADE, [1] 1970-80

[Dollar amounts in millions]

	1970	1974	1975	1976	1977	1978	1979	1980	Average annual growth rate, 1974-80
Imports	$903	$3,404	$3,250	$3,613	$3,993	$5,454	$6,527	$7,150	13.2
Exports	775	2,994	3,168	3,666	3,767	4,615	5,537	6,019	12.3
Turnover	1678	6,398	6,418	7,279	7,760	10,069	12,064	13,169	12.8
Balance	−128	−410	−82	+53	−226	−839	−990	−1,131	---------

[1] Defined as developed plus less developed countries.

Source: IMF, Direction of Trade Yearbook 1974-80, except 1970 from CIA, Handbook of Economic Statistics 1980.

TABLE A-3.—UNITED STATES-ROMANIA TRADE, 1974-80

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1981
U.S. exports	277.1	189.3	249.0	259.4	317.4	500.5	720.2	503.9
Of which:								
Agricultural	156.5	101.1	171.6	118.3	148.5	336.5	462.6	368.4
Manufactured [1]	108.5	57.6	49.2	61.0	118.9	100.3	134.4	151.7
Other	12.1	30.7	28.2	80.1	50.5	63.7	123.2	83.8
U.S. imports	130.5	133.0	198.8	233.3	346.6	329.3	312.2	560.1
Of which:								
Agricultural	12.5	12.5	16.1	20.6	31.4	34.0	30.9	28.0
Manufactured [1]	37.5	35.4	95.2	133.8	212.7	229.7	229.9	377.7
Other	80.5	85.1	87.5	78.9	102.5	65.6	51.4	154.4
Trade turnover	407.6	322.3	447.8	492.7	664.0	829.8	1,032.4	1,064.0
Balance	+146.6	+56.3	+51.0	+26.1	−29.2	+171.1	+408.0	−56.2

[1] SITC 5-8.

Source: U.S. Census Bureau, magnetic tapes.

TABLE A-4.—ROMANIA: HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1975	1976	1977	1978	1979	1980
Commercial debt	2,024	1,841	2,306	3,609.0	5,100.0	6,300.0
Owed to U.S. banks				290.0	336.0	304.0
Official backed debt	706	659	715	80.0	905.0	1,600.0
Of which:						
Eximbank				0	75.0	140.9
CCC				54.9	137.7	93.2
Multilateral borrowing	194	403	584	753.8	893.5	1,113.4
Of which:						
IMF	158	331	368	333.0	325.0	328.0
IBRD	36	72	216	420.8	568.5	785.4
Gross debt	2,924	2,903	3,605	5,162.8	6,898.5	9,013.4
Commercial assets	(475)	(375)	(217)	(229.0)	(250.0)	(200.0)
Net debt	2,449	2,528	3,388	4,933.8	6,648.5	8,813.4

Sources: U.S. Government, IMF, IBRD.

TABLE A-5.—ROMANIAN TRADE WITH THE INDUSTRIALIZED WEST (IW) AND UNITED STATES, 1974-80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980
Imports from IW	$1,965.6	$1,896.8	$1,872.5	$2,168.7	$2,781.0	$3,545.3	$3,619.5
United States	$277.1	$189.3	$249.0	$259.4	$317.6	$500.5	$720.2
U.S. share (percent)	14.1	10.0	13.3	12.0	11.4	14.1	19.9
European Community	$1,305.9	$1,293.2	$1,220.3	$1,360.2	$1,810.8	$2,384.3	$2,283.5
European Community share (percent)	66.4	68.2	65.2	62.3	65.1	67.3	63.1
Of which:							
Foodstuffs [1]	$162.6	$164.7	$203.0	$116.7	$111.1	$317.0	$555.1
United States	$93.5	$75.6	$92.0	$46.3	$42.0	$176.4	$339.0
U.S. share (percent)	57.5	45.9	45.3	39.7	37.8	55.7	61.1
European Community	$62.9	$28.1	$72.5	$62.8	$51.0	$114.5	$199.0
European Community share (percent)	38.7	17.0	35.7	53.8	45.9	36.1	35.8
Manufactured [2]	$1,624.9	$1,562.6	$1,424.8	$1,803.7	$2,369.8	$2,700.1	$2,442.5
United States	$108.6	$57.6	$49.3	$61.0	$119.0	$102.7	$134.4
U.S. share (percent)	6.7	3.7	3.5	3.4	5.0	3.8	5.5
European Community	$1,162.5	$976.0	$1,042.5	$1,177.0	$1,665.8	$2,020.2	$1,807.9
European Community share (percent)	71.5	62.5	73.2	65.3	70.3	74.8	74.0
High technology	$281.3	$318.9	$270.6	$425.4	$676.3	$709.6	$512.7
United States	$55.6	$31.2	$20.4	$24.1	$67.9	$42.7	$37.4
U.S. share (percent)	19.8	9.8	7.5	5.7	10.0	6.0	7.3
European Community	$184.3	$234.0	$202.8	$288.3	$466.6	$556.4	$395.4
European Community share (percent)	65.5	73.4	74.9	67.8	69.0	78.4	77.1
Exports to IW	$1,370.8	$1,450.0	$1,716.8	$1,700.1	$2,049.8	$2,913.9	$3,083.7
United States	$130.5	$133.0	$188.7	$233.3	$375.7	$357.6	$341.2
U.S. share (percent)	9.5	9.2	11.6	13.7	18.3	12.3	11.1
European Community	$980.0	$1,071.1	$1,216.7	$1,167.5	$1,394.8	$2,203.4	$2,413.8
European Community share (percent)	71.9	73.9	70.9	68.7	68.1	75.6	78.3
Trade turnover with IW	$3,336.4	$3,346.8	$3,589.3	$3,868.8	$4,830.8	$6,459.2	$6,703.2
Balance	−$594.8	−$446.8	−$155.7	−$468.6	−$731.2	−$631.4	−$535.8
Balance with United States	−$146.6	−$56.3	−$50.3	−$26.1	+$58.1	−$142.9	−$379.0
Balance with European Community	−$319.9	−$222.1	−$3.6	$192.7	$415.9	$180.9	$130.5

[1] SITC 0, 1, 4.
[2] SITC 5-8.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF ROMANIAN IMPORTS FROM THE INDUSTRIALIZED WEST (IW), 1974-80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of 1980 total	Average annual growth rate 1974-80 (percent)
Imports from IW	$1,965.6	$1,896.8	$1,872.5	$2,168.7	$2,781.0	$3,545.3	$3,619.5	100.0	10.7
Foodstuffs (SITC 0, 1, 4)	162.6	164.7	203.0	116.7	111.1	317.0	554.8	15.3	22.7
Cereals and cereal preps	69.8	133.3	153.1	38.7	47.8	129.9	292.4	--------	--------
Feeding-stuff for animals	55.7	7.6	23.3	12.1	11.5	62.4	79.4	--------	--------
Meat and meat preps	.1	.9	.9	.5	15.7	49.8	104.8	--------	--------
Dairy products and eggs	1.3	.7	.1	7.1	2.2	22.2	8.2	--------	--------
Animal and vegetable oils and fats	19.9	9.9	10.8	8.7	10.1	13.1	13.7	--------	--------
Other	15.8	12.3	14.9	40.6	23.8	39.6	56.3	--------	--------
Crude materials (SITC 2)	124.5	84.1	150.4	149.8	185.7	298.5	289.6	8.0	15.1
Oil seeds, nuts, and kernels	.1	4.0	45.6	39.4	41.3	74.9	64.2	--------	--------
Textile fibers and waste	59.2	27.5	12.2	18.4	34.2	64.0	64.5	--------	--------
Hides, skins, furskins	28.6	12.2	37.2	28.4	53.8	61.3	30.4	--------	--------
Crude fertilizers and minerals	7.6	14.0	15.7	24.9	24.2	43.1	43.1	--------	--------
Pulp and paper	7.5	11.8	18.7	20.7	25.1	31.8	33.1	--------	--------
Crude rubber	11.4	6.9	12.2	11.1	13.0	15.6	17.0	--------	--------
Other	9.8	67.7	8.8	6.9	4.1	7.8	37.3	--------	--------
Mineral fuels (SITC 3)	41.2	75.9	80.6	85.0	98.6	209.9	314.1	8.7	40.3
Coal, coke briquettes	36.9	71.6	75.7	79.6	88.8	199.1	302.9	--------	--------
Other	4.3	4.3	4.9	5.4	9.8	10.8	11.2	--------	--------
Chemicals (SITC 5)	286.0	204.4	230.7	243.0	327.3	440.3	471.7	13.0	8.7
Chemical elements, compounds	128.4	77.7	82.4	83.7	111.5	196.9	215.4	--------	--------
Chemicals (n.e.s.)	42.2	42.6	46.0	56.1	77.4	79.1	94.9	--------	--------
Pesticides, disinfectants	(14.5)	(11.3)	(13.2)	(18.1)	(25.4)	(26.5)	(43.4)	--------	--------
Plastic materials, etc	55.1	42.6	40.0	40.8	59.2	71.8	65.2	--------	--------
Dyes and tanning products	45.8	27.5	38.8	39.6	51.3	58.9	65.3	--------	--------
Medicinal products	6.4	6.3	13.3	10.0	13.0	17.3	13.5	--------	--------
Other	8.1	7.7	10.2	12.8	14.9	16.3	13.4	--------	--------
Basic industrial goods (SITC 6)	567.0	609.4	607.5	603.9	760.5	941.3	914.4	25.3	8.3
Iron and steel	328.3	366.2	359.2	346.5	435.4	568.7	463.1	--------	--------
Textile yarn, fabric, etc	71.7	70.9	73.7	69.2	89.0	104.1	98.2	--------	--------
Nonferrous metals	65.0	47.9	57.5	54.9	59.9	77.8	91.0	--------	--------
Nonmetal mineral manufacturers	33.4	39.4	43.4	48.6	64.7	70.2	93.3	--------	--------
Metal manufacturers (n.e.s.)	34.5	49.2	37.0	47.0	64.0	66.3	117.9	--------	--------
Leather, dressed fur, etc	6.0	8.0	10.1	9.2	16.0	23.4	22.5	--------	--------
Rubber manufacturers (n.e.s.)	8.9	16.3	14.4	19.3	18.9	16.2	15.6	--------	--------
Other	19.2	11.5	12.2	9.2	12.6	14.6	12.8	--------	--------
Machines and transport equipment (SITC 7)	718.2	691.8	529.7	870.6	1,185.6	1,202.8	931.7	25.7	4.4
Nonelectric machinery	422.6	431.5	338.7	598.9	870.3	840.9	595.5	--------	--------
Electrical machinery	129.0	146.4	112.9	155.4	224.6	265.9	328.8	--------	--------
Transport equipment	166.6	113.9	78.0	116.3	90.7	96.1	104.4	--------	--------
Miscellaneous manutured goods (SITC 8)	53.7	57.1	56.9	86.2	96.3	115.8	124.7	3.4	15.1
Instruments, watches, clocks	29.1	32.5	27.9	37.3	48.4	57.0	60.7	--------	--------
Miscellaneous manufactures (n.e.s.)	14.6	12.5	13.9	26.1	24.4	32.1	32.7	--------	--------
Clothing	8.3	10.4	13.6	17.2	17.8	20.8	24.3	--------	--------
Other	1.7	1.7	1.5	5.6	5.7	5.9	2.0	--------	--------
Other	12.7	9.4	13.7	13.5	15.9	19.7	18.3	.5	6.3

TABLE A-7.—LEADING ROMANIAN IMPORTS FROM THE INDUSTRIALIZED WEST (IW)

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Machinery, nonelectric	1	$840, 850	23.7		$870, 316	31.3		$598, 892	27.6	
67	Iron and steel	2	568, 702	16.0		435, 379	15.7		346, 494	16.0	
72	Electrical machinery	3	265, 885	7.5		224, 631	8.1		155, 410	7.2	
32	Coal, coke, briquettes	4	199, 142	5.6		88, 796	3.2		79, 648	3.7	
51	Chemical elements and compounds	5	196, 891	5.6	58.4	111, 549	4.0	62.2	83, 749	3.9	58.3
04	Cereals and cereal preparations	6	129, 887	3.7		47, 758	1.7		38, 741	1.8	
65	Textile yarn, fabric, etc	7	104, 126	2.9		89, 047	3.2		69, 455	3.2	
73	Transport equipment	8	96, 055	2.7		90, 701	3.3		116, 336	5.4	
59	Chemicals, n.e.s	9	79, 131	2.2		77, 384	2.8		56, 096	2.6	
68	Nonferrous metals	10	77, 788	2.2	72.2	59, 876	2.2	75.3	54, 859	2.5	73.7
	Top 50 total		3, 533, 041			2, 769, 689			2, 160, 165		
	Total imports from 17 IW		3, 545, 278			2, 781, 006			2, 168, 748		
	Top 50 as percent of total imports from 17 IW		99.7			99.6			99.6		
	5-DIGIT SITC AGGREGATES										
7151	Machine tools for metal	1	242, 819	6.8		267, 051	9.6		140, 324	6.5	
3218	Coke and semicoke of coal, etc	2	169, 093	4.8		45, 560	1.6		21, 873	1.0	
0440	Maize (corn), unmilled	3	104, 286	2.9		24, 531	.9		15, 865	.7	
6782	Iron, steel tube seamless, n.e.s	4	93, 977	2.7		76, 501	2.8		74, 753	3.4	
7198	Other machines, nonelectric	5	84, 455	2.4	19.6	73, 256	2.6	17.5	59, 673	2.8	14.4
2214	Soy beans (excludes flour and meal)	6	73, 947	2.1		40, 788	1.5		39, 050	1.8	
67323	Alloy steel bars, etc	7	66, 950	1.9		37, 939	1.4		36, 933	1.7	
51212	Hydrocarbons, excludes styrene	8	62, 928	1.8		22, 189	.8		13, 352	.6	
2111	Bovine and equine hides	9	59, 686	1.7		52, 646	1.9		26, 658	1.2	
0813	Oil-seed cake and meal, etc	10	57, 702	1.6	28.7	9, 634	.3	23.4	12, 020	.6	20.3
6715	Other ferro-alloys	11	54, 328	1.5		27, 600	1.0		29, 011	1.3	
72992	Electric heaters, welders, etc	12	50, 323	1.4		19, 658	.7		15, 672	.7	
0111	Meat of bovine animals, fresh, chilled	13	45, 131	1.3		15, 179	.5		493	0	
71954	Machine tool parts, accessories	14	44, 721	1.3		37, 564	1.4		18, 272	.8	
67413	Alloy steel, heavy plate	15	44, 355	1.3	35.4	31, 324	1.1	28.1	21, 014	1.0	24.2
72952	Electric measuring, control equipment, n.e.s	16	42, 317	1.2		37, 227	1.3		29, 067	1.3	
71922	Pumps for cases, etc	17	38, 576	1.1		62, 901	2.3		21, 852	1.0	
73289	Other motor vehicle parts	18	36, 389	1.0		34, 267	1.2		32, 487	1.5	
5812	Products of polymerizing, etc	19	34, 991	1.0		26, 689	1.0		20, 404	.9	
71992	Cocks, valves, etc., n.e.s	20	34, 522	1.0	40.7	38, 257	1.4	35.3	29, 794	1.4	30.4
53101	Synthetic organic dye, natural indigo	21	33, 940	1.0		32, 167	1.2		23, 635	1.1	
7222	Switchgear, etc	22	33, 797	1.0		44, 778	1.6		25, 609	1.2	
73492	Aircraft parts	23	33, 525	.9		28, 771	1.0		28, 208	1.3	
59999	Other chemical products, preparations, n.e.s	24	31, 986	.9		32, 594	1.2		24, 693	1.1	
3214	Coal (anthracite, bituminous)	25	30, 049	.8	45.3	43, 236	1.6	41.8	57, 775	2.7	37.7
	Top 50 total		2, 137, 335			1, 575, 142			1, 156, 122		
	Total imports from 17 IW		3, 454, 278			2, 781, 006			2, 168, 748		
	Top 50 as percent of total imports from 17 IW		60.3			56.6			53.3		

TABLE A-8.—ORIGINS OF LEADING ROMANIAN IMPORTS FROM THE INDUSTRIALIZED WEST

[Dollar amounts in millions of U.S. dollars]

			1979				1977		
1979 item rank	SITC	Description: Origin	Origin rank	Value	Item/origin percent of total	Origin	Origin rank	Value	Item/origin percent of total
1	71	Machinery, nonelectric		$840.9	23.7			$598.9	27.6
		Federal Republic of Germany.	1	247.4	29.4	Federal Republic of Germany.	1	210.2	35.1
		France	2	176.5	21.0	Japan	2	116.2	19.4
		Italy	3	134.6	16.0	Italy	3	54.1	9.0
		United States	4	54.8	6.5	United States	7	25.6	4.3
		European Community		633.2	75.3	European Community.		379.5	63.4
2	67	Iron and steel		568.7	16.0			346.5	16.0
		Federal Republic of Germany.	1	223.7	39.3	Federal Republic of Germany.	1	132.2	38.2
		Austria	2	94.0	16.5	Japan	2	76.9	[illegible]
		Japan	3	69.8	12.3	Austria	3	37.8	10.8
		United States	12	4.0	.7	United States	8	7.9	2.3
		European Community		357.6	62.9	European Community.		58.2	16.8
3	72	Electrical machinery		265.9	7.5			155.4	7.2
		Federal Republic of Germany.	1	75.7	28.5	Federal Republic of Germany.	1	45.2	29.1
		France	2	54.4	20.4	France	2	25.2	16.2
		Italy	3	34.1	12.8	Japan	3	21.0	13.5
		United States	6	14.4	5.4	United States	7	8.2	5.3
		Europen Community		200.0	75.2	European Community.		102.1	65.7
4	32	Coal, coke, briquettes		199.1	5.6			79.6	3.7
		Federal Republic of Germany.	1	118.5	59.5	United States	1	53.6	67.2
		United States	2	29.1	14.6	Italy	2	11.8	14.8
		France	3	22.8	11.5	Austria	3	7.3	9.1
		Italy	4	17.6	8.8	Federal Republic of Germany.	4	5.0	6.2
		European Community		166.6	83.7	European Community.		16.8	21.1
5	51	Chemical elements and compounds.		196.9	5.6			83.7	3.9
		Federal Republic of Germany.	1	68.0	34.5	Federal Republic of Germany.	1	28.2	33.6
		The Netherlands	2	42.0	21.3	The Netherlands	2	11.3	13.5
		France	3	31.2	15.8	France	3	10.5	12.6
		United States	11	2.0	1.0	United States	8	2.9	3.4
		European Community		172.9	87.8	European Community.		64.1	76.6

TABLE A-9.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM ROMANIA, 1974-80

[Dollar amounts in thousands of dollars]

	1974		1975		1976		1977		1978		1979		1980		Total 1974-80	
	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)
IW, total	$1,370,756	100.0	$1,449,952	100.0	$1,716,836	100.0	$1,700,094	100.0	$2,049,791	100.0	$2,913,941	100.0	$3,083,711	100.0	$17,313,707	100.0
Belgium-Luxembourg	26,187	1.9	27,345	1.9	32,070	1.9	29,126	1.7	32,013	1.6	48,682	1.7	39,521	1.3	518,441	3.0
Denmark	23,275	1.7	32,247	2.2	17,947	1.0	9,959	.6	11,339	.6	13,233	.5	15,661	.5	99,991	.6
Federal Republic of Germany	374,345	27.3	403,657	27.8	476,831	27.8	461,383	27.1	605,957	29.6	893,898	30.7	880,448	28.6	5,376,296	31.1
France	159,442	11.6	174,285	12.0	205,506	12.0	181,885	10.7	231,759	11.3	344,749	11.3	407,050	13.2	2,231,182	12.9
Ireland	4,192	.3	2,370	.2	2,915	.2	3,493	.2	2,618	.1	3,381	.1	3,880	.1	17,448	.1
Italy	242,314	17.7	244,063	16.8	236,382	13.8	239,951	14.1	232,825	11.4	369.213	12.7	599,761	19.4	1,935,339	11.2
The Netherlands	76,490	5.6	108,186	7.5	156,216	9.1	150,153	8.8	179,143	8.7	390,042	13.4	317,032	10.3	777,109	4.5
United Kingdom	79,740	5.8	78,907	5.4	88,806	5.2	91,516	5.4	99,245	4.8	140,180	4.8	150,443	4.9	832,629	4.8
European Community subtotal	985,985	-------	1,071,060	-------	1,216,673	-------	1,167,466	-------	1,394,899	-------	2,203,378	-------	2,413,796	78.3	11,788,434	68.1
Austria	65,550	4.8	64,447	4.4	69,846	4.1	72,294	4.3	81,316	4.0	85,244	2.9	106,175	3.4	846,683	4.9
Canada	26,330	1.9	18,913	1.3	24,609	1.4	20,102	1.2	25,291	1.2	33,724	1.2	32,312	1.0	209,398	1.2
Finland	13,628	1.0	11,003	.9	10,462	.6	12,785	.8	11,755	.6	14,420	5.5	16,697	.5	80,324	.5
Japan	65,772	4.8	45,604	3.1	46,496	2.7	40,353	2.4	63,424	3.1	114.753	3.9	65,577	2.1	1,172,259	6.8
Norway	15,109	1.1	6,446	.4	5,974	.3	6,438	.4	5,621	.3	6,171	.2	9,005	.3	77,637	.4
Sweden	43,298	3.2	66,593	4.6	99,306	5.8	119,901	7.1	49,312	2.4	66,204	2.3	62,669	2.0	433,790	2.5
Switzerland	24,568	1.8	32,930	2.3	44,725	2.6	26,675	1.6	42,484	2.1	32,457	1.1	36,235	1.2	571,036	3.3
United States	130,516	9.5	132,956	9.2	198,745	11.6	233,287	13.7	375,689	18.3	357,590	12.3	341,245	11.1	2,134,146	12.3

TABLE A-10.—COMPOSITION OF ROMANIAN EXPORTS TO THE INDUSTRIALIZED WEST (IW), 1974–80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	Percent of 1980 total	Average annual growth rate (percent)
Exports to IW	$1,370.8	$1,450.0	$1,716.8	$1,700.1	$2,049.8	$2,913.9	$3,083.7	100.0	14.5
Foodstuffs (SITC 0, 1, 4)	282.6	280.6	228.2	236.5	233.0	265.1	229.9	7.5	−3.4
Meat and meat preps	95.0	119.9	92.5	68.4	89.2	105.5	97.6	-------	-------
Fruit and vegetables	65.0	64.4	68.5	71.3	67.4	63.8	64.0	-------	-------
Animal and vegetable oils and fats	75.7	44.3	21.0	48.4	25.4	37.7	7.9	-------	-------
Beverages and tobacco	5.6	8.6	15.0	13.1	12.1	18.1	19.0	-------	-------
Live animals	20.0	17.2	13.6	8.2	12.9	14.1	13.1	-------	-------
Dairy products and eggs	7.3	8.3	8.3	12.4	10.1	8.0	8.9	-------	-------
Other	14.0	17.9	9.3	14.7	15.9	17.8	19.4	-------	-------
Crude materials (SITC 2)	113.1	106.4	91.3	77.3	100.4	122.9	123.4	4.0	1.5
Wood, lumber, and cork	57.8	57.5	26.6	25.3	27.6	36.3	40.4	-------	-------
Crude rubber	8.8	7.3	13.6	14.0	20.2	30.2	24.5	-------	-------
Textile fibers and waste	18.8	13.5	24.5	15.1	21.9	26.7	16.7	-------	-------
Crude animal and vegetable materials	8.6	7.9	7.5	8.3	12.1	11.5	13.4	-------	-------
Pulp and paper	3.1	4.0	8.6	3.8	4.0	6.5	7.8	-------	-------
Other	16.0	16.2	10.5	10.8	14.6	11.7	20.6	-------	-------
Mineral fuels (SITC 3)	342.0	355.1	492.4	389.0	448.7	1,004.5	1,159.0	37.6	22.6
Petroleum and petroleum products	337.5	351.0	493.6	387.4	447.7	1,004.3	1,158.8	-------	-------
Other	4.5	4.1	3.8	1.6	1.0	.2	1.2	-------	-------
Chemicals (SITC 5)	71.8	65.2	79.7	81.0	78.1	82.6	112.1	3.6	7.7
Chemical elements, compounds	45.9	33.1	31.2	33.7	40.6	49.0	52.1	-------	-------
Fertilizers, manufactured	7.8	18.8	24.5	19.2	10.4	12.0	30.5	-------	-------
Plastic materials, etc	10.9	4.2	14.3	13.2	13.4	8.2	11.9	-------	-------
Other	7.2	9.1	9.7	14.9	13.7	13.4	17.6	-------	-------
Basic industrial goods (SITC 6)	221.1	227.7	287.8	346.1	469.8	548.7	516.1	16.7	15.2
Iron and steel	74.4	80.5	81.8	122.5	175.0	214.0	180.0	-------	-------
Textile yarn, fabric, etc	40.4	40.7	71.0	68.3	93.2	98.2	85.0	-------	-------
Nonferrous metals	46.6	42.5	48.2	56.5	75.7	77.0	81.7	-------	-------
Nonmetal mineral manufacturers	17.2	17.3	21.5	23.2	34.9	42.8	44.6	-------	-------
Metals manufacturers (n.e.s.)	13.5	13.7	17.0	23.2	28.4	36.7	41.4	-------	-------
Wood, cork manufacturers (n.e.s.)	17.2	18.1	19.8	23.2	29.5	34.3	38.0	-------	-------
Paper and paperbased manufacturers	8.3	8.9	19.1	16.6	21.9	30.9	30.3	-------	-------
Other	3.5	6.0	9.4	10.6	11.2	14.8	15.1	-------	-------
Machines and transport equipment (SITC 7)	72.1	93.8	112.5	124.2	136.1	178.3	202.4	6.6	18.8
Nonelectric machinery	32.8	49.7	59.4	67.0	81.6	88.3	98.8	-------	-------
Transport equipment	25.2	28.2	38.6	39.5	31.7	58.8	68.4	-------	-------
Electrical machinery	14.1	15.9	14.5	17.6	22.9	31.2	35.3	-------	-------
Miscellaneous manufactured goods (SITC 8)	259.5	314.7	406.6	440.0	569.2	703.3	728.9	23.6	18.8
Clothing	126.8	152.8	210.0	205.9	284.3	356.4	339.2	-------	-------
Furniture	73.7	95.3	112.0	137.7	155.0	178.5	212.8	-------	-------
Footwear	39.7	45.8	58.8	66.5	91.9	116.3	125.0	-------	-------
Miscellaneous manufactures (n.e.s.)	12.6	13.0	16.8	20.3	25.6	37.5	37.3	-------	-------
Brooms and basketwork	(4.9)	(6.1)	(6.8)	(8.8)	(11.2)	(13.3)	(14.4)	-------	-------
Other	6.7	7.8	8.7	9.6	13.3	14.6	14.6	-------	-------
Other	8.6	6.5	13.3	6.0	14.5	8.5	11.6	.4	5.1

TABLE A-11.—LEADING ROMANIAN EXPORTS TO THE INDUSTRIALIZED WEST (IW)

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
33	Petroleum and petroleum products	1	$1,004,298	34.5		$447,741	21.8		$387,380	22.8	
84	Clothing	2	356,351	12.2		284,330	13.9		205,916	12.1	
67	Iron and steel	3	214,014	7.3		174,990	8.5		122,464	7.2	
82	Furniture	4	178,546	6.1		155,046	7.6		137,687	8.1	
85	Footwear	5	116,301	4.0	64.2	90,982	4.4	56.3	66,522	3.9	54.1
01	Meat and meat preparations	6	105,516	3.6		89,237	4.4		68,461	4.0	
65	Textile yarn, fabric, etc.	7	98,233	3.4		93,215	4.5		68,336	4.0	
71	Machinery, nonelectric	8	88,260	3.0		81,556	4.0		67,037	3.9	
68	Nonferrous metals	9	77,022	2.6		75,650	3.7		58,539	3.4	
05	Fruit and vegetables	10	63,813	2.2	79.0	67,420	3.3	76.1	71,315	4.2	73.7
	Top 50 total		2,905,370			2,034,196			1,696,660		
	Total exports to 17 IW		2,913,941			2,049,791			1,700,094		
	Top 50 as percent of total exports to 17 IW		99.7			99.2			99.8		
	5-DIGIT SITC AGGREGATES										
3321	Gasoline	1	514,811	17.7		261,871	12.8		141,824	8.3	
3323	Distillate fuels	2	269,782	9.3		58,589	2.9		39,601	2.3	
3324	Residual fuel oils	3	209,979	7.2		122,010	6.0		199,174	11.7	
85102	Footwear, leather	4	115,426	4.0		89,911	4.4		65,816	3.9	
84111	Men's outerwear, nonknit	5	111,577	3.8	41.9	88,567	4.3	30.3	62,372	3.7	29.9
82109	Furniture, parts, n.e.s	6	110,856	3.8		96,320	4.7		87,958	5.2	
84112	Women's outerwear, nonknit	7	86,960	3.0		67,974	3.3		46,056	2.7	
67271	Iron, simple steel coils	8	73,445	2.5		16,529	.8		12,816	.8	
82101	Chairs, seats, and parts	9	63,930	2.2		55,938	2.7		40,404	2.4	
84144	Outerwear, knit, nonelastic	10	53,465	1.8	55.3	46,343	2.3	44.1	31,133	1.8	42.8
84143	Underwear, knit, nonelastic	11	50,683	1.7		38,876	1.9		34,101	2.0	
0138	Other prepared or preserved meat	12	48,049	1.6		40,650	2.0		35,950	2.1	
6841	Aluminum, alloys, unwrought	13	34,478	1.2		42,485	2.1		42,700	2.5	
4216	Sunflower seed oil	14	30,906	1.1		20,630	1.0		40,756	2.4	
2312	Synthetic rubber and rubber substitutes	15	29,560	1.0	61.9	18,818	.9	52.0	13,708	.8	52.6
6575	Carpets, etc., knotted	16	28,200	1.0		28,079	1.4		23,365	1.4	
7125	Tractors, nonroad	17	27,409	.9		31,900	1.6		24,345	1.4	
68422	Aluminum plate, sheet, strip	18	27,139	.9		18,042	.9		5,135	.3	
84113	Men's underwear, not knit	19	24,980	.9		17,954	.9		15,052	.9	
6652	Household, hotel, etc., glass	20	24,177	.8	66.4	18,764	.9	57.6	6,912	.4	57.0
67251	Iron, simple steel blooms, etc	21	24,079	.8		15,971	.8		16,491	1.0	
7197	Ball, roller, etc., bearings	22	22,193	.8		13,810	.7		9,951	.6	
67411	Iron, simple steel heavy plate	23	21,671	.7		27,308	1.3		23,660	1.4	
0113	Meat of swine, fresh, chilled, frozen	24	21,052	.7		27,249	1.3		19,989	1.2	
73289	Other motor vehicle parts	25	20,420	.7	70.2	15,937	.8	62.5	18,407	1.1	62.2
	Top 50 total		2,350,982			1,490,782			1,235,440		
	Total exports to 17 IW		2,913,941			2,049,791			1,700,094		
	Top 50 as percent of total exports to 17 IW		80.7			72.7			72.7		

TABLE A-12.—INDUSTRALIZED WEST (IW) EXPORT TRADE SHARES TO ROMANIA, 1974–80

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		1980		Total, 1974–80	
	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)	(Amount)	(Percent)
IW, total	$1, 965, 622	100. 0	$1, 896, 821	100. 0	$1, 872, 522	100. 0	$2, 168, 748	100. 0	$2, 781, 005	100. 0	$3, 545, 278	100. 0	$3, 619, 471	100. 0	$17, 933, 797	100. 0
Belgium-Luxembourg	61, 685	3. 1	58, 913	3. 1	80, 119	4. 3	69, 191	3. 2	83, 841	3. 0	125, 171	3. 5	194, 536	5. 4	673, 456	3. 8
Denmark	13, 964	. 7	8, 948	. 5	13, 331	. 7	11, 511	. 5	15, 778	. 6	20, 798	. 6	19, 507	. 5	103, 837	. 6
Federal Republic of Germany	713, 302	36. 3	662, 047	34. 9	520, 279	27. 8	640, 627	29. 5	884, 078	31, 8	1, 075, 515	30. 3	894, 586	24. 7	5, 390, 434	30. 1
France	183, 579	9. 3	202, 400	10. 7	258, 935	13. 8	274, 460	12. 7	351. 423	12. 6	553, 335	15. 6	465, 137	12. 9	2, 289, 269	12. 8
Ireland	268	0	231	0	1, 743	. 1	2, 209	. 1	5, 053	. 2	4, 064	. 1	24, 604	. 7	38, 172	. 2
Italy	192, 297	9. 8	213, 593	11. 3	191, 116	10. 2	164, 653	7. 6	241, 245	8. 7	332, 674	9. 4	327, 112	9. 0	1, 662, 690	9. 3
The Netherlands	68, 068	3. 5	59, 975	3. 2	66, 497	3. 6	56, 955	2. 6	85, 499	3. 1	123, 083	3. 5	127, 788	3. 5	587, 865	3. 3
United Kingdom	72, 756	3. 7	87. 135	4. 6	88, 260	4. 7	140, 545	6. 5	143, 838	5. 2	149, 652	4. 2	230, 051	6. 4	912, 237	5. 1
European Community sub total	1, 305, 919	-------	1, 293, 242	-------	1, 220, 280	-------	1, 360, 151	-------	1, 810, 755	-------	2, 384, 293	-------	2, 283, 321	63. 1	11, 657, 960	65. 0
Austria	84. 113	4. 3	87. 492	4. 6	93, 092	5. 0	113, 919	5. 3	146, 627	5. 3	215, 265	6. 1	197, 116	5. 4	937, 624	5. 2
Canada	5, 106	. 3	61, 095	3. 2	39, 352	2. 1	11, 809	. 5	32, 150	1. 2	27, 574	. 8	18, 823	. 5	195, 909	1. 1
Finland	3 855	. 2	3, 332	. 2	7, 703	. 4	11, 654	. 5	14, 359	. 5	22, 724	. 6	19, 469	. 5	83, 096	. 5
Japan	166, 281	8. 5	135. 433	7. 1	133, 732	7. 1	258, 516	11. 9	231, 658	8. 3	181, 062	5. 1	202, 655	5. 6	1, 309, 337	7. 3
Norway	10, 879	. 6	11, 413	. 6	18, 174	1. 0	10, 353	. 5	10, 288	. 4	7, 585	. 2	9, 405	. 3	78, 097	. 4
Sweden	52, 709	2. 7	49, 559	2. 6	45, 523	2. 4	46, 678	2. 2	77, 514	2. 8	99, 138	2. 8	88, 666	2. 4	459, 787	2. 6
Switzerland	59, 624	3. 0	65, 955	3. 5	65, 632	2. 5	96, 263	4. 4	140, 153	5. 0	107, 174	3. 0	79, 785	2. 2	614, 586	3. 4
United States	277, 136	14. 1	189, 300	10. 0	249, 034	13. 3	259, 405	12. 0	317, 562	11. 4	500, 464	14. 1	720, 231	19. 9	2, 513, 132	14. 0

TABLE A-13.—PROJECTED 1985 ROMANIAN TRADE WITH THE INDUSTRIALIZED WEST

[Dollar amounts in millions]

	1980	1985		Assumed average annual rate of growth, 1981–85 (percent)	
		Low	High	Low	High
Romanian exports	$3,084	$3,785	$4,836	4	9
Foodstuffs	230	230	294	0	5
Crude materials	123	217	306	12	20
Mineral fuels	1,159	684	897	−10	−5
Chemicals	112	279	385	20	28
Basic industrial goods	516	758	951	8	1
Machinery and transportation equipment	202	389	492	14	19
Miscellaneous manufactures	729	1,228	1,531	11	16
Romanian imports	3,620	3,818	5,192	1	7
Foodstuffs	555	500	582	−2	1
Crude materials	290	276	407	−1	7
Mineral fuels	314	632	781	15	20
Chemicals	471	520	692	2	8
Basic industrial goods	914	785	1,009	−3	2
Machinery and transportation equipment	932	842	1,369	−2	8
Miscellaneous manufactures	125	263	352	16	23
Total turnover	−536	−33	−356		

TABLE A-14a.—ROMANIA: HARD CURRENCY TRADE AND DEBT ESTIMATES, 1980–85, AVERAGE ANNUAL EXPORT GROWTH RATE (3.34 PERCENT), AVERAGE ANNUAL IMPORT GROWTH RATE (−2.81 PERCENT)

[Amounts in millions of U.S. dollars]

	1980	1981	1982	1983	1984	1985
Imports	8,089	7,862	7,641	7,426	7,217	7,015
Less exports	5,821	6,015	6,216	6,424	6,639	6,860
Less invisibles (shipping, tourism, gold sales, arms sales, etc.)	−27	−27	−27	−27	−27	−27
Plus interest on end of year debt	900	1,177	1,440	1,687	1,916	2,126
Required growth of debt/exports to balance accounts	2,773	2,629	2,469	2,293	2,098	1,881
Imports	8,089	7,862	7,641	7,426	7,217	7,015
Exports	5,821	6,015	6,216	6,424	6,639	6,860
Trade balance	−2,268	−1,846	−1,424	−1,002	−579	−154
Current account balance excluding interest	−2,295	−1,873	−1,451	−1,029	−606	−181
invisibles	−27	−27	−27	−27	−27	−27
Interest on debt		900	1,177	1,440	1,687	1,916
Yearend debt	9,000	11,773	14,402	16,871	19,164	21,262

TABLE A-14b.—ROMANIA: HARD CURRENCY TRADE AND DEBT ESTIMATES, 1980–85, AVERAGE ANNUAL EXPORT GROWTH RATE (8.26 PERCENT), AVERAGE ANNUAL IMPORT GROWTH RATE (2.40 PERCENT)

[Amounts in millions of U.S. dollars]

	1980	1981	1982	1983	1984	1985
Imports	8,089	8,283	8,482	8,685	8,894	9,107
Less exports	5,821	6,302	6,822	7,386	7,996	8,656
Less invisibles (shipping, tourism, gold sales, arms sales, etc.)	−27	−27	−27	−27	−27	−27
Plus interest on end of year debt	900	1,191	1,479	1,758	2,028	2,278
Required growth of debt/exports to balance accounts	2,908	2,877	2,805	2,684	2,505	2,260
Imports	8,089	8,283	8,482	8,685	8,894	9,107
Exports	5,821	6,302	6,822	7,386	7,996	8,656
Trade balance	−2,268	−1,981	−1,660	−1,300	−898	−451
Current account balance excluding interest	−2,295	−2,008	−1,687	−1,327	−925	−478
Invisibles	−27	−27	−27	−27	−27	−27
Interest on debt		900	1,191	1,479	1,758	2,028
Yearend debt	9,000	11,908	14,786	17,591	20,275	22,781

TABLE A-15.—PROJECTED UNITED STATES-ROMANIA TRADE

[Dollar amounts in millions]

		1985		Assumed average annual rate of growth, 1981–85 (percent)	
	1981	Low	High	Low	High
U.S. exports	$503.9	$358.2	$717.9	–8	.9
Foodstuffs (SITC 0,1,4)	335.3	273.1	490.9	–5	10
Crude materials and fuels (SITC 2 and 3)	116.6	47.3	170.7	–20	10
Manufactures (SITC 5–8)	51.7	37.0	56.0	–8	2
Other (SITC 9)	.3	.3	.3	0	0
U.S. imports	560.1	346.7	522.6	–12	–2
Foodstuffs (SITC 0,1,4)	26.4	26.4	32.1	0	5
Crude materials and fuels (SITC 2 and 3)	155.7	49.3	81.3	–25	–15
Manufactures (SITC 5–8)	377.8	270.7	408.9	–8	2
Other (SITC 9)	.3	.3	.3	0	0
Trade turnover	1,064.0	704.9	1,240.5	–10	4
Balance	–56.3	+11.5	+195.3		

TABLE A-16.—ROMANIAN OIL TRADE

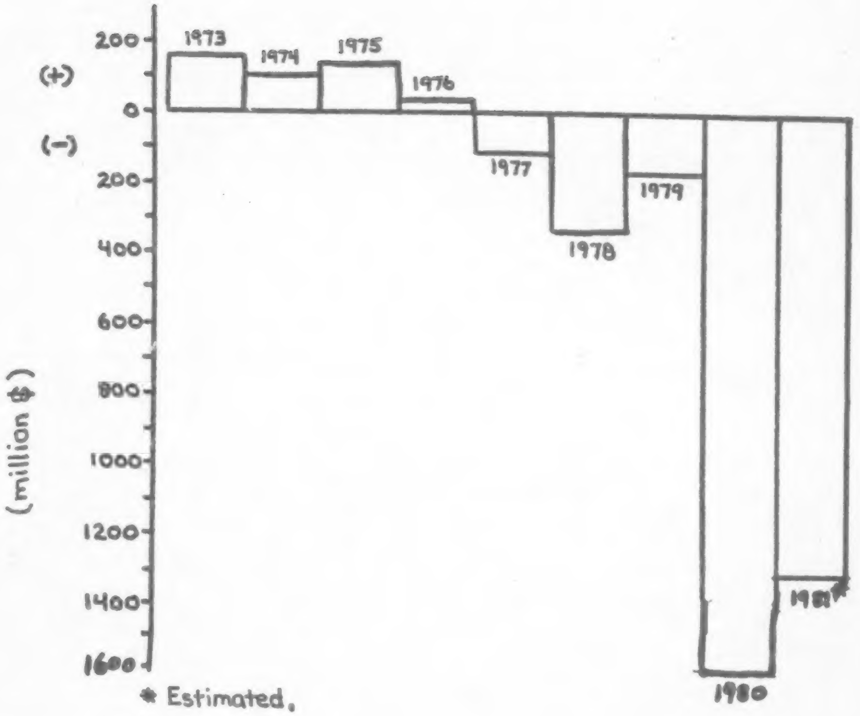
Year	Volume (barrels per day)	Value (million)	Cost per barrel imports
1973:			
Exports	99,900	$275.5	
Imports	82,860	106.0	$3.50
1974:			
Exports	131,780	535.5	
Imports	90,760	434.5	13.10
1975:			
Exports	125,240	538.5	
Imports	101,700	400.0	10.80
1976:			
Exports	159,040	735.0	
Imports	169,500	717.0	11.60
1977:			
Exports	136,720	714.5	
Imports	176,880	821.5	12.70
1978:			
Exports	151,180	912.8	
Imports	258,940	1,240.9	12.90
1979:			
Exports	147,920	1,859.4	
Imports	285,960	2,052,2	19.40
1980:			
Exports	184,240	2,205	
Imports	320,530	3,820	32.60
1981:			
Exports	(1)	[1]2,200	(2)
Imports	(2)	[1]3,530	

[1] Estimated. [2] Not Available.

Sources: IMF, International Financial Statistics and Romanian Economic Handbook.

FIGURE 1

ROMANIAN NET OIL EXPORTS
(millions of U.S. dollars)



Source: IMF, International Financial Statistics, MARCH 1982.

U.S.S.R.: AN ASSESSMENT OF U.S. AND WESTERN TRADE POTENTIAL WITH THE SOVIET UNION THROUGH 1985

By Hedija H. Kravalis*

CONTENTS

Page
Chapter I. U.S.S.R. Objectives and Performance in Trade During the Seventies 277
  A. Objectives 277
  B. Performance 279
Chapter II. U.S.S.R. Hard Currency Debt 284
Chapter III. Hard Currency Export Capabilities, 1981–1985 286
Chapter IV. U.S.S.R. Trade With the Industrialized West Through 1985 295
Chapter V. U.S.-U.S.S.R. Trade Potential Under pre-Afghanistan Conditions 297
  A. Potential Composition and Volume of U.S.S.R. Exports to the United States 297
  B. Potential Composition and Volume of U.S.S.R. Imports from the United States 300
  C. General Assessment of U.S.-U.S.S.R. Trade Complementarity 303
Chapter VI. Projected 1985 U.S.-U.S.S.R. Trade Under Alternative Scenarios 304

APPENDIX

Table A1. U.S.S.R. Foreign Trade by Major Trading Groups, 1960–80 306
Table A2. U.S.S.R. Hard Currency Trade, 1970–80 307
Table A3. U.S.-U.S.S.R. Trade, 1974–80 308
Table A4. U.S.S.R. Hard Currency Debt 308
Table A5. U.S.S.R. Trade With the Industrialized West and U.S., 1974–80 309
Table A6. Composition of U.S.S.R. Imports from the Industrialized West, 1974–80 310
Table A7. 1979 Top Exports of 17 Industrialized West Countries from U.S.S.R 311
Table A8. Origins of Leading U.S.S.R. Imports from the Industrialized West 312
Table A9. Industrialized West Export Trade Shares to U.S.S.R., 1974–80 313
Table A10. Composition of U.S.S.R. Exports to the Industrialized West, 1974–80 314
Table A11. 1979 Top Imports of 17 Industrialized West Countries from U.S.S.R 315
Table A12. Industrialized West Import Trade Shares from U.S.S.R 316
Table A13. Projected 1985 U.S.S.R. Trade With Industrialized West 317
Table A14. Projected 1985 U.S.-U.S.S.R. Trade 317

EXECUTIVE SUMMARY

In the late 1960's, the Soviets recognized that imports of Western capital equipment and technology could bolster the lagging Soviet economy and that grain imports could be used over the long term to expand meat production. Moscow turned to trade with the West with the expectation that capital and technology imports could be absorbed by the industrial sector, that it could rapidly expand exports, and that Western financing would be available to finance imports that could not be covered by exports. As a result of this strategy, trade with the West burgeoned from $5 billion in 1970 to $54 billion in 1981. Soviet imports consisted primarily of capital equipment, industrial products, and grains, while exports were comprised of mineral fuels, wood, chemicals, and metals.

---

*The author wishes to acknowledge the U.S.S.R. Affairs Division, Department of Commerce and Joan P. Zoeter, CIA for their parts in developing significant sections of this paper. Thanks also go to Jimmy Moyer, whose editing notably improves its quality.

Throughout the seventies, Soviet imports from the West were higher than exports. The resulting deficits created fairly large hard currency liabilities to the West, which were diminished to a significant degree by revenues from gold and military sales as well as earnings from invisibles. Hence, at yearend 1980 Soviet net debt amounted to about $10.4 billion.

Part of the Soviet Union's difficulties in trading with the West has been its limited export capability. The Soviet export profile consists of few commodities, with oil providing nearly 60 percent of the growth in earnings between 1974 and 1980. According to CIA estimates. Soviet oil production will peak in the early 1980's and decline rapidly thereafter. Clearly this would have a serious effect on hard currency earnings, 50 percent of which have in recent years been based on the oil account. Gas exports expanded significantly in the 1970's and will continue to grow in the eighties. It is not clear, however, that by 1985, earnings from gas will compensate for the erosion of hard currency earned from oil.

Being a major industrial power, the Soviet Union should have a capability to export manufactured goods. Soviet export performance, however, has been weakest in this area. Finished manufactures have comprised a minimal 3–4 percent of total hard currency earned from the Industrialized Western countries. Furthermore, it is unlikely that this share will show marked improvement in the years ahead.

Future trade with the West will depend in large part on Soviet perception of their hard currency earning capability. This in turn will be largely determined by the outcome of oil earnings. If the volume of oil exports remains at 1980 levels or decreases moderately, then the Soviets will have a variety of options available during the first half of the eighties, provided imports increase modestly. Should oil exports drop dramatically, (10 percent volume decrease in 1981 and 20 percent decrease 1982–85), the Soviets would face repeatedly large trade deficits around mid-decade, even with a moderate (11–12 percent) annual growth in imports.

Projections developed in this paper indicate that Soviet trade with the Industrial West could rise to about $66 billion by 1985, representing an 81 percent increase over 1979. This compares with a 142 percent growth between 1974 and 1979 and is indicative of the slowdown in trade associated with growth beyond the initial stages when trade increases rapidly from a small base. It also reflects a slowdown in oil export earnings. Assuming that oil exports decline in volume by about 10 percent annually, total export growth would be 9.2 percent, much lower than the 18 percent annual growth averaged between 1974 and 1979. The import growth rate is likely to be constrained at 11–12 percent, yielding $34–$35 billion in 1985 imports.

In the second half of the 1970's, U.S.-U.S.S.R. trade averaged about 10 percent of Western trade with the Soviet Union. (As a share of 1980 Industrialized West-Soviet trade, U.S. trade dropped to 4 percent in response to U.S. post-Afghanistan sanctions.). U.S.-Soviet trade showed some improvement in 1981, primarily as a result of the removal of agricultural sanctions. 1982 trade between the two countries should continue to improve, but due to strained political relations, cannot be expected to recover to the levels of the late 1970's.

Growing faster than Soviet-Industrialized West trade, U.S.-U.S.S.R. trade increased from $1 billion in 1974 to $4.5 billion in 1979, dropping back to $2.9 billion by 1981. During most of the period in the 1970's, more than one-half of this trade consisted of grain, which persistently yielded large surpluses for theUnited States.

Our projections indicate that U.S.-U.S.S.R. trade turnover could be $5.2 billion by 1985. This represents a 16 percent increase over 1979 and is slower than the 36 percent growth of the 1974–79 period. It is also considerably less than projected growth in U.S.S.R.-Industrialized West trade for the same period.

The projection of moderate growth potential in U.S.-U.S.S.R. trade rests on the proposition that the U.S. is not likely to supply annually as much grain to the Soviets as it did in 1979. It is also based on the notion that the United States is a limited market for the commodities the Soviets have to export. While the Soviets frequently cite lack of most-favored-nation treatment as the cause for low exports to the United States, studies have shown that granting most-favored-nation status to the Soviets would increase exports to this country by a modest 8–9 percent. Furthermore, it is safe to conclude that regardless of the future levels of trade between the two countries the U.S. is likely to run large surpluses based primarily on agricultural exports.

CHAPTER I. U.S.S.R. OBJECTIVES AND PERFORMANCE IN TRADE DURING THE SEVENTIES

A. SOVIET OBJECTIVES IN TRADE WITH THE WEST IN THE 1970'S

Soviet goals in their trade with the West have evolved over the years based on changing economic and political needs. Following World War II the U.S.S.R., along with the other members of the Soviet Bloc, was economically isolated from the West. This isolation was caused, in part, by political tensions with the West which resulted in Western-imposed restrictions on trade with the Communist world. It was also a result of Soviet designs to create an economically independent unit in the form of CMEA. Trade with the West was minimal and was used only for relieving shortages and bottlenecks in key sectors.

Soviet trade goals changed in the late 1960's. Soviet planners realized that economic growth could be enhanced through expanded participation in the world economy with less emphasis placed on self-sufficiency. Political tensions, particularly with Western Europe, began to ease, opening the way for greater East-West economic exchanges.

As the U.S.S.R. entered the seventies, its leaders' commitment to foreign trade, particularly with the West, was strengthened. At the 24th CPSU Congress in 1971, Soviet Party leader Brezhnev referred to foreign trade as a "big reserve" for Soviet economic development. He underscored the importance of foreign commerce more strongly at the 25th Congress in 1976:

> **Like other states we strive to use the advantages provided by foreign economic ties to mobilize extra possibilities for the successful solution of economic tasks and to gain time to increase the efficiency of production and speed-up the progress of science and technology.**

Soviet objectives in trading with the West in the 1970's were threefold:

(1) Western trade was still to be used to alleviate shortages and bottlenecks in key economic sectors. Fluctuation in domestic agricultural production caused *inter alia* by bad weather forced the U.S.S.R. in the 1970's to import grains from the West, especially from the United States. The Soviets also imported Western steel to make up for domestic shortages.

(2) Western trade was to be used to improve factor productivity in certain sectors and to develop new industries. Imports of Western capital equipment and technology aided the growth of the U.S.S.R.'s chemical, transportation and energy industries.

(3) Soviet leaders viewed trade as an underpin of their country's detente relationship with Western nations. In 1976 Brezhnev stated that ". . . economic and scientific-technical ties with the capitalist states strengthen and broaden the material basis of the policy of peaceful coexistence."

In order to achieve these objectives the Soviet Union has sought to change the framework within which it has conducted foreign trade. These changes have been geared to acquiring the foreign exchange needed for purchase of Western imports and to facilitating commercial contacts with Western countries.

In the 1970's the Soviet Government was committed to improving existing export capacity and to creating new export-oriented industries. Premier Kosygin raised the issue in 1976: "Since foreign trade has become an important factor of the national economy, the question arises of the organization in a number of cases of special production facilities oriented toward export and the satisfaction of specific requirements of foreign markets."

The Soviet Union has also sought to redesign its foreign trade structure to meet the needs of increased trade with the West. Foreign trade organizations have been reorganized along export and import product lines and their relationships with appropriate enterprises and industrial organizations have been more clearly defined. In addition, the Soviet Government expressed the intention in the 1970's to grant financial incentives to enterprises producing for the hard currency market.

Last, the Soviet Union has sought Western commitment to long-term economic relations through bilateral agreements which in some cases have guaranteed increased bilateral trade volumes. Long-term economic, technical and industrial cooperation agreements have acted as legal "umbrellas" for other aspects of Soviet-Western economic cooperation. Compensation agreements have become a means for the Soviet Union to purchase Western capital goods with little or no hard currency expenditures.

Following is an assessment of Soviet performance in achieving the goals outlined by their objectives.

B. U.S.S.R. PERFORMANCE IN TRADE DURING THE 1970'S: IMPORTS

The Soviet strategy of opening trade with the West was born in the late 1960's with the Soviet recognition that:

1. Imports of Western capital equipment and technology could bolster the lagging Soviet economy; and
2. Grain imports could not only offset shortfalls in bad harvest years but could also be used over the long term to expand meat production.

The strategy mapped by the Soviets in their approach to the West for purchases of capital equipment, technology, and grain was based upon certain expectations:

1. That imports of capital equipment, and technology could be absorbed by the Soviet industrial sector;
2. That grain would be available on Western markets;
3. That Moscow could adequately expand its export base in order to finance, to a maximum extent, projected imports; and
4. That Western governments and financial institutions would be willing to extend credits to the U.S.S.R. at competitive rates.

The results of this strategy are reflected in appendix A, table A–1. Trade with the Developed West rose very rapidly; between 1970 and 1980, the average annual rate of growth for Soviet-Developed West trade was 25 percent, compared with the 17 percent average annual rate of growth for trade between the U.S.S.R. and the Eastern bloc. The East bloc, however, continues to be the Soviet's major trading group, though its importance has diminished.[1] The East bloc countries were partners in 55 percent of total Soviet trade in 1970; in 1980 this share had declined to 43 percent. Whereas in 1970 the Developed West was involved in 21 percent of total Soviet foreign trade, in 1980 this statistic stood at 34 percent.

The Soviet strategy for trading with the Developed West was "import led" in that trading was viewed primarily as a means of acquiring products deemed essential to Soviet economic development. This strategy contrasts with the strategy of many Western industrialized nations that view trading in terms of exports not only earning foreign exchange but also utilizing idle production capacity and reducing unemployment.

Soviet Imports from the Developed West

Soviet imports from the Developed West increased from $3 billion in 1970 to over $24 billion in 1980 (see appendix table A–1). While growth of the U.S.S.R.'s imports from the Developed West appears large, it should be noted that much of it took place in the first half of the seventies. It was during those first years of détente that a sense of euphoria prevailed both among Soviet importers and Western exporters, resulting in a 33 percent average annual rate of growth in imports between 1970 and 1975. In the second half of the seventies Soviet imports of Western goods slowed. The slower growth was partly a result of Soviet inability to absorb Western technology and capital goods into the industrial sector and partly a result of Moscow's efforts to slow the growth in its hard currency debt.

---

[1] Trade with the LDC's also increased in the decade of the seventies. At an average annual rate of 19 percent, trade with LDC's grew from $3 billion in 1970 to $18 billion in 1980.

Hence, the average annual rate of import growth between 1975 and 1980 was cut almost in half to 17 percent.

An analysis of the composition of Soviet imports from the Industrialized West [2] reveals that they have fallen, in order of importance, into three major categories: machinery and transport equipment, basic manufactures, and foodstuffs. (data in table A-6 of the appendix disaggregates Soviet imports) 1974–79.

Machinery and Transport Equipment (SITC 7, table A-6) is the product category for which the Soviets have expended the largest amount of hard currency. Since 1974, imports of machinery and transport equipment have accounted for 35 percent of Soviet imports from the Industrialized West.[3] Products in this category were to help modernize sectors of the Soviet economy and raise production to higher levels. The 1979 and 1980 expenditures for machinery and transport equipment, though about one-third of total Soviet imports from the Industrialized West, represented a decline in SITC 7 imports that resulted from fewer orders being placed in the West since 1976. It is likely that this, in turn, was caused by a large backlog of unfinished construction and uninstalled equipment, as well as a growing import bill.

The principal Soviet imports within the large and significant machinery and transport equipment category have been:

1. Nonelectrical machinery, specifically machine tools, pumps, and valves;
2. Electrical machinery, e.g., measuring and controlling instruments and switchgear for electrical circuits; and
3. Specialized ships and boats.

The Soviets have imported these products because they embody superior technology and/or because the Soviets themselves are unable to produce the products in sufficient quantity to meet their needs. In the case of machine tools, both conditions apply. Soviet technology lags far behind the West for advanced, numerically controlled machine tools that perform a variety of operations simultaneously. The Soviets have also imported more conventional machine tools such as those for automobile and truck factories. Although they themselves have a considerable capability for manufacturing these, in the interest of precision and productivity, the Western product, which is up to five times as fast and more precise, is preferred.

Importation of pumps and valves has been for similar reasons as Soviet industry has been unable to meet the requirements of massive energy development projects. Imports of sophisticated measuring and controlling instruments also have been necessary because the Soviets have difficulty matching Western technology. Finally, the Soviets have imported specialized ships and boats to meet specific needs that their shipbuilding industry could not easily satisfy.

---

[2] Because of the availability of detailed and consistent data from a sample of countries that make up the Industrialized West and because these countries represent about 90 percent of Soviet-Western trade as well as Soviet hard currency trade, unless otherwise noted, the Industrialized West is used as a proxy for both the developed West and for hard currency trade. The following countries are in the Industrialized West sample: Belgium-Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, United Kingdom, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, and the United States.

[3] Throughout this paper IW represents the Industrialized West and is comprised of the countries cited in footnote 2.

Notwithstanding the above, the portion of Soviet imports from the West that are of a "high technology" nature is relatively small. For example, by one definition of high technology products developed by the U.S. Department of Commerce, the U.S.S.R. imported about $2.3 billion of high technology items in 1980 or only about 12 percent of the total value of 1980 Soviet imports from the Industrialized West.[4]

Despite these relatively small numbers, products such as steel and large diameter pipe as well as equipment and finished manufactures not classified as high technology, can make a significant contribution to developing a more modern Soviet economy by helping clear bottlenecks and fill gaps in domestic production.

The second largest group of products imported by the Soviets from the West has been *Basic Industrial Manufactures* (*SITC 6*). Roughly two-thirds of imports in this category have been iron and steel products—pipes, sheets, plates, bars, and rods. Although the Soviet Union is a major steel producer, it has turned to imports for many steel products. In recent years, the Soviet steel industry has been plagued by a number of difficulties, the primary being inadequate investment in all sectors of the industry. Although there have been gradual increases in capital spending, costs of constructing new capacity have risen greatly. Furthermore, regulations requiring environmental consideration, though not as strict as in the West, have absorbed chunks of new capital spending. Added problems include outmoded plant and equipment and raw material shortages.

The remaining significant category of goods imported by the Soviets is *Foodstuffs* (table A–6). The major portion of this category is comprised of grain (table A–7), especially corn and wheat.

Grain production has been the Achilles' heel of the Soviet economy, yet vital to meat output, the centerpiece of Soviet consumer welfare. Although investments for mechanization, increased use of fertilizer, and land reclamation have been impressive over the years, little can be done about the weather—a key factor behind the highly variant Soviet grain output levels.

To maintain momentum in the leadership's commitment to expanding meat supplies, the Soviets turned to importing grain from the West. In value terms, grain imports escalated from about $400 million in 1974 to over $2600 million in 1979, the peak year for these imports from the IW. While 1980 imports declined somewhat, some increase is expected in 1981.

The primary source for Soviet grain imports has been the United States, which for several years supplied over one-half of Soviet grain import needs. Part of these imports were charted by the Long Term Agreement (LTA) in effect for a five year period between 1 October 1976 and 30 September 1981. However, the Soviets consistently purchased amounts of grain above the 6 million metric tons that they were obligated to buy under the Agreement. At the beginning of 1980, the U.S. action of restricting grain exports to the 8 million metric tons the U.S. was obligated to offer the Soviets under the LTA forced the Soviets to look elsewhere.

---

[4] See U.S. Department of Commerce study entitled "Quantification of Western Exports of High Technology Products to Communist Countries." Office of Trade and Investment Analysis project No. D–41, February, 1982.

While they were successful in securing replacement markets for a sizeable portion of wheat imports, alternate supplies of corn were more difficult to find. The Soviets of course, will continue to be in the market for grains during the coming Five Year Plan. With the grain embargo lifted and the Long-Term Agreement extended for an additional year, they are likely to source at least half of their near term grain imports in the United States.

U.S.S.R. PERFORMANCE IN TRADE DURING THE SEVENTIES: EXPORTS

Between 1970 and 1980, Soviet exports to the Developed West grew from $2.4 billion to $24.4 billion. This 26 percent average annual rate of growth contrasts with rates of growth for the same period of 17–18 percent for exports to Eastern Europe and the LDC's. Although exports to the West increased at a more rapid pace than those to Eastern Europe, the East bloc countries have always absorbed the larger share of Soviet deliveries. The Eastern countries were markets for 42 percent of Soviet exports in 1980 while the Developed West imported 32 percent (table A–1).

Since 1974, over 85 percent of Soviet exports to the Industrialized West have fallen into three major categories: (1) mineral fuels, (2) crude materials, and (3) basic industrial goods (tables A–10, A–11).

To date, Soviet *mineral fuels* exports have earned far more hard currency than any other group of products (table A–10). Most of the earnings have come from oil and oil product deliveries, which were boosted significantly by price rises throughout the 1970s. Petroleum and petroleum product exports accounted for 37 percent of earnings from the Industrialized West in 1974; by 1980 this share had jumped to 51 percent. Nearly 60 percent of the growth in total earnings from exports to the Industrialized West between 1974 and 1980 came from earnings on the oil account.

Another mineral fuels product that has been important to Soviet hard currency earnings is coal. In 1975, however, earnings peaked and since that time have declined steadily. Nonetheless, in 1980 coal exports brought a significant $549 million into the hard currency account (table A–11).

The brightest spot in the mineral fuels picture has been gas production and export. Hard currency earnings from gas are a phenomenon of the 1970's. Earnings from exports to the Industrialized Western countries grew from a mere $87 thousand in 1974 to $1.7 billion in 1980. Deliveries have mainly been to Western Europe and have been charted by numerous gas-for-pipe deals.

After exports of mineral fuels, *crude materials* have been the second major source of hard currency for the U.S.S.R., with shipments accounting for about 17 percent of total hard currency earned from the Industrialized West since 1974. The two commodity groups comprising the crude materials category are: (1) wood and its products, and (2) cotton.

Hard currency earnings from sales of wood and wood products to the Industrialized Western countries reached nearly $1.6 billion in 1980. These earnings were almost equal to those of natural gas in the same year, and accounted for a significant 7 percent of hard currencies earned from the Industrialized Western countries.

The other commodity in the crude materials category has been fiber exports, consisting almost entirely of raw-cotton. Earnings from this product remained at about $400–$450 million annually during the decade of the seventies and are likely to continue at those levels in the early part of the 1980's.

The third largest hard currency export earner has been *basic industrial goods*. Earnings of over $2.5 billion in 1980 accounted for 11 percent of all hard currency gained from the Industrialized West in that year. The two product groups in the basic industrial goods category are nonmetallic mineral manufactures (specifically diamonds) and nonferrous metals.

A single remaining category of exports that merits attention is Soviet exports of finished manufactured goods. A discussion of Soviet performance in this area is presented for two reasons. The first is that the Soviet Union considers itself among the ranks of major industrial powers, and as such, should be able to compete on the world market with its industrial products. The second is that the Soviets have specifically aimed at improving their performance in exports of finished manufactures, often purchasing Western machinery and know-how to achieve this goal.

During the seventies, the value of finished manufactured goods exports rose slowly (table A–10). On average, hard currency earnings from these deliveries have been less than 4 percent of foreign exchange earned from the Industrialized Western countries. Further, the share contributed by finished manufactures exports to total hard currency earnings was the lowest for the U.S.S.R. among all East bloc countries.[5]

Table T–1 displays finished manufactures exports at the two digit SITC level of aggregation. These account for virtually all finished manufactures exported by the Soviets during the greater part of the 1970s.

TABLE T–1.—MAJOR SOVIET EXPORTS OF FINISHED MANUFACTURES TO THE INDUSTRIALIZED WEST, 1974–80

[Dollar amounts in millions]

SITC	Commodity	1974	1975	1976	1977	1978	1979	1980	1980 as percent of finished manufactures total
73	Transport equipment	$78	$155	$213	$183	$249	$469	$353	51
71	Nonelectric machinery	78	131	145	103	123	115	157	23
89	Miscellaneous manufactured articles	25	28	40	41	65	87	77	11
72	Electrical machinery	27	36	36	41	42	46	48	7
86	Instruments, watches, clocks	22	25	23	25	29	32	37	5
	Subtotal	230	375	457	393	508	749	672	98
	A. Total finished manufactures exports to Industrialized West	232	378	460	398	513	761	687	
	B. Total exports to Industrialized West	8,081	8,426	10,178	11,622	12,888	18,503	23,657	
	C. A/B (percent)	2.9	4.5	4.5	3.4	4.0	4.1	2.9	

---

[5] Although finished manufactures exports to the Industrialized West earn relatively insignificant amounts of hard currency, such exports to LDC's have expanded rapidly in recent years. Despite this expansion, however, earnings of hard currency from finished manufactures still comprise a relatively small percentage of total Soviet hard currency earnings.

In general, the Soviets have had difficulty establishing a manufactures export sector and when they have had some success in developing a product line for export e.g. cars, they have been plagued by problems of design, quality, marketing and after-sales service.

Because Soviet commodity exports were not sufficient to support the import bill of the seventies, and gold sales, military deliveries and earnings from invisibles failed until 1978 to fill the gap, the Soviet Union turned to the West for credit.

CHAPTER II. U.S.S.R. HARD CURRENCY DEBT

The deficit in trade with the West has been the key to the growth in Soviet gross hard currency debt from about $1.8 billion in 1971 to about $19.0 billion at yearend 1980.[6] During the same period, commercial assets in the West grew from $1.2 billion to $8.6 billion, resulting in a net hard currency debt in 1980 of $10.4 billion. The largest portion of the deficits that generated the debt occurred in 1975 and 1976, when Soviet imports of machinery, equipment and grain totalled $14.2 and $15.3 billion respectively, while hard currency exports earned only $7.8 and $9.7 billion. In those two years alone the Soviets accumulated a deficit of $12 billion. The size of the increase in debt provoked concern both in the U.S.S.R. and in the West over Soviet management of its hard currency resources.

Since 1976, the Soviets have adopted a more cautious balance of payments approach. In 1977, they substantially reduced their hard currency trade deficit to $3.3 billion. This was possible partly because of the record 1976 grain crop and partially on the ability of the Soviets to increase oil exports. In 1978 the deficit increased somewhat to $3.8 billion but the current account registered a surplus with increased sales of gold and arms. In 1979 the deficit was nearly half of that incurred in the year prior. The Soviets benefitted from rapidly increasing oil prices and a very favorable gold market as well as increased military sales which together put the Soviets in their strongest hard currency position in years. Data for 1980 and preliminary 1981 figures indicate a rather significant erosion of this position; nevertheless, the Soviet external payments and debt situation can be generally described as fairly good.

Prior to 1975, Moscow preferred officially backed credit financing, and was able to make arrangements for this financing on favorable terms. Beginning in 1975 and continuing ito 1976, however, the Soviets tapped the commercial markets for the very large amounts of hard currency needed to finance the escalating imports of those years. Most of the growth in commercial debt occurred in those two years as the Soviets negotiated loans amounting to $5.6 billion. The rise in commercial indebtedness slowed after 1976.

A portfolio of debt covered mostly by official credits has clearly been the preference of the Soviets, despite the fact that loans are tied to potential exports from the country extending the line of credit. The benefits of lower interest rates and longer repayment periods have outweighed the disadvantages of not having untied credit balances.

---

[6] These figures on Soviet debt do not include borrowings of the CMEA multilateral banks IIB and IBEC, which had a combined net debt of 5.0 billion at year end 1980.

Since 1975–76, when the percentage of net debt covered by government guarantees fell to about 50 percent, the portion of net debt covered by official credit has risen to 80 percent. Table T–2 shows the amount of Soviet exposure by major Western governments as of June 1980. France led the West with $5.3 billion committed, followed by the Federal Republic of Germany with $4.2 billion. U.S. exposure was only $435 million in Eximbank credits committed prior to the passage of the Jackson-Vanik Amendment in 1975. From table A–4 we see that at yearend 1980, roughly $8.0 billion of the $16 billion committed by Western governments to the Soviets had been drawn down, with undrawn commitments of about $8 billion.

There is good reason to believe that in the early seventies, the Soviets saw the United States as a major source of loan capital needed to finance imports aimed at developing vast Soviet energy and raw material resources. There was discussion of massive U.S.-Soviet LNG projects for which government guaranteed financing was a necessary element. However, due to a prohibition in the Trade Act of 1974, potential Eximbank financing beyond that which was granted prior to that year has not been extended to the Soviets. In retrospect, even if the Trade Act had become law, it is evident that the total loan authority available to Eximbank to finance worldwide lending during the 1972–80 period was very limited. Furthermore, Exim lending, viewed by some as subsidizing recipients, generally was not in Congressional favor even for friendly LDC's. Hence, even if the Jackson-Vanik amendment had not been enacted it was probably unrealistic to have anticipated very large sums forthcoming from Exim to finance the huge deals that were in discussion with the Soviets.

On the commercial side, in 1979, U.S. banks and their offshore subsidiaries held about $482 million of net Soviet debt of $10.4 billion, or about 5 percent. U.S. banks have thus played a moderate role in financing Soviet imports from the West, not the larger role that would be expected given the U.S. share of Soviet imports if grain is included in the analysis. While expanded lending could come from improved U.S.-Soviet relations, it is not likely to be very large or crucial to Soviet financing needs. Under current interpretations of U.S. laws, the U.S.S.R. is effectively limited to borrowing a theoretical maximum of about $4 billion from U.S. banks. Although this figure is large,

TABLE T–2.—*Total Official Export Credit Committed to the Soviet Union: June 30, 1980*

	Millions of U.S. dollars
United States	435
France	5,300
United Kingdom	1,500
Federal Republic of Germany	4,200
Japan	2,000
Austria	400
Spain	1,400
Sweden	300
Canada and Switzerland	0
Others	700
Total	16,235

Source: U.S. Department of State.

in practice, the regulations would effectively restrict actual loans to a significantly smaller amount; not every U.S. bank is interested in lending to the U.S.S.R.; not every bank could be consistently exposed up to its legal lending limit vis a vis the U.S.S.R.

CHAPTER III. U.S.S.R. HARD CURRENCY EXPORT CAPABILITIES, 1981–85

Soviet needs for Western grain, technology, and manufactured goods remain significant. Import needs, however, are not the sole determinant of trade. Over the long term, continued growth in Western trade with the Soviets must rely on an ability of the U.S.S.R. to expand its hard currency earning capability.

There are opportunities for the Soviet Union to increase hard currency earnings from invisibles such as shipping and tourism. The Soviets can also earn large sums from gold and military sales. Inevitably, however, the bulk of increased hard currency earnings will have to be achieved through expanded merchandise exports, i.e. shipments of raw and semi-processed goods, manufactured products, and other commodities. The issue of Soviet export capability will be particularly important in the early to mid-1980's in view of the expected decline in Soviet exports of oil.

Following is an analysis of performance and prospects for export earnings from several commodities which represent the major portion of Soviet hard currency earning capability. These are energy (oil, gas, coal), wood, diamonds, cotton, and non-ferrous metals.

An examination of chemicals is also included because these represent a rapidly growing source of foreign exchange. Finally, there is an appraisal of Soviet performance in finished manufactures exports.

Energy Products

Since 1974, Soviet energy products have been the highlight of Soviet export performance to the Industrialized West, as they have consistently earned more hard currency than any other group of products. Most of the earnings have come from exports of oil and oil products, but coal and gas have also generated notable amounts of foreign exchange. Oil deliveries, however, are likely to decrease over the 1981–85 period.

The implications for Soviet hard currency earnings from diminished oil exports are serious. In 1980, 51 percent of total foreign exchange gained from exports to the Industrialized West came from oil and oil products. Furthermore, 60 percent of hard currency earnings growth between 1974 and 1980 was generated by revenues from oil and its products.

If, as the CIA predicts, oil production declines, then oil exports can be expected to decrease also. In this case, increases in earnings from oil will depend solely on price rises, which are not likely to occur frequently through 1985.

In recent years, coal (table A–11, SITC 32) has accounted for 3–4 percent of hard currency exports to the Industrialized West. From a 1975 peak of $532 million, earnings from coal deliveries had been declining until 1979 when they rebounded somewhat. Earnings from the Industrialized West in 1979 stood at $474 million, and as the seventh largest export commodity at the two digit level of aggregation, accounted for 2.5 percent of total hard currency earned from the Industrialized Western countries.

Among the factors behind the poor performance in the coal industry have been lagging investment and failure to open new mines to offsett depletions in older areas and add to new production capacity. Aggravating these problems have been deteriorating geological conditions encountered as mining proceeds eastward, declining energy content per unit in established mining areas, severe labor shortages, and perhaps most important, inadequate transport infrastructure from East Siberian regions to both consuming and export centers. It will not be until the end of the 1980's that solutions to some of these problems can be formulated. Furthermore, as those solutions begin to be reflected in improved production, the outcome will likely be an improved domestic situation rather than a stronger export position, as increments to production will be earmarked for the home market. The exception may be production from the Yakutsk basin which is being undertaken with Japanese cooperation and will result in higher coal exports to Japan within two to three years.

Near term prospects for hard currency earnings from coal, therefore, do not appear promising. Increased deliveries to Japan, at best will only offset stagnating or declining earnings from exports to the other Industrialized Western countries.

Natural gas has been one of the fastest growing hard currency export earners. Continuing the rapid growth of recent years, 1979 gas exports (table A-11, SITC 34) to Western countries increased 11 percent in volume; aided by price rises hard currency earnings on gas gained about 19 percent over 1978 levels. Earnings in 1980 increased further on the strength of both volume and price gains. As a result of the numerous gas-for-pipe deals concluded with West European countries, the volume of 1980 exports to the West doubled from the 12.4 billion cubic meters exported in 1976. In 1980, hard currency earnings from gas were nearly $3 billion. During 1981–85, production is scheduled to increase at a rapid 6–7 percent per annum or a 50 percent gain for the period, with a production target of 600–640 billion meters by 1985.

The most dramatic development potentially affecting gas exports is the proposed Northern Gas Pipeline. Negotiations have been underway between the Soviets and West European customers for $10–$15 billion worth of equipment to build a gas pipeline between Western Siberia and Western Europe. As payment for pipeline, compressors, and associated equipment the proposal calls for shipment of about 40 billion cubic meters of gas annually for a 20 year period beginning in 1985 to West Germany, France, Italy, Belgium and Austria. This will increase West European dependency on the Soviet Union for 25 percent of its gas imports. Gas purchase contracts have already been signed with West Germany. It is expected that they will be signed soon with the remaining partners. In addition, contracts for equipment purchase are already under negotiation.

If the Soviets encounter difficulties in fulfilling their already contracted obligations as well as potential future deliveries, the difficulties will probably result from transportation bottlenecks and inadequate infrastructure. For the last several years, the principal source of increments to Soviet gas production has been the Tyumen region, the site of the large Urengoy field. Reserves in that area are known to be huge, but there are persistent reports of inadequate rail and river transport, insufficient technology and poor housing and support facilities for workers. Added to these are problems with inter-ministry coordination, labor shortages, and ever-rising costs associated with moving northward for increased production.

Wood and Wood Products. The second largest group of commodities exported by the Soviet Union has been wood and wood products (table A-11, SITC 24). All but a small portion of these consist of softwood, by far the most plentiful species found in the U.S.S.R. The major items of export within the broader wood category are logs and lumber. Generally logs are exported to Japan and lumber to West European countries, specifically Great Britain, West Germany, France, and Italy.

In 1979, hard currency earnings from wood deliveries amounted to $1.5 billion. Earnings from wood increased throughout the 1970's except in 1975 and 1978, when sluggish markets and lower prices depressed earnings. Prospects for growth in hard currency earnings from wood and wood products through 1985 are not favorable. Investment in the forestry industry has been a low priority for several years; even if higher investment levels were assigned, increased productivity and output would not become apparent within the next five years. Several other problems have plagued the industry and have constrained its output potential. There has been disagreement about whether the Western European areas should be developed or if production should be concentrated in the Eastern Siberian region. Huge complexes have been built at Bratsk and Ust-Ilimsk in Siberia with the expectation of economies of scale. Instead, there has been difficulty getting production on stream and keeping the plants operative at full capacity. Imported equipment stands idle and uninstalled, labor supplies are scarce, and severe climatic conditions impede development. Finally, the Soviet export commodity mix reflects an orientation toward lower value products such as logs rather than products embodying some degree of value added processing. Even among these primary products where processing is minimal, there are problems with quality. One study observes that while Soviet planners have wanted to adjust the product mix in favor of more highly processed commodities, the current structure is likely to persist at least through 1990.[7] There are several reasons for the dilemma: substantial investment would be required to upgrade or create new production facilities, export production facilities are located in areas that are not amenable to value added processing and, finally, the Soviets would have to substitute lower grade wood for domestic consumption, thereby freeing the higher quality product for export.

Despite these difficulties, some small gains in foreign exchange earnings from the wood account will be visible in the next several years. The Japanese market is dependent to a degree upon East Siberian wood and the Soviets are likely to press the Japanese to accept new compensation arrangements involving wood as an export. The European market will continue to be a significant outlet for Soviet lumber but will be moderated by economic conditions as they affect demand for this commodity.

---

[7] Braden, Kathleen E. "Role of Imported Technology in the Export Potential of Soviet Forest Products", Discussion Paper Submitted to Association of American Geographers project on Soviet Natural Resources in the World Economy. Washington, D.C., November 1979.

Chemicals. In 1979, chemical exports accounted for over 7 percent of total hard currency earnings from the Industrialized West, and were third largest, following oil and wood, among the two-digit SITC commodities (table A-11). Earnings from chemicals have expanded rapidly since 1975, with much of the growth derived from increases in the dollar value of radioactive elements exports made possible primarily by Soviet uranium enrichment services. Principal Western markets for the enriched products have been the Federal Republic of Germany and France. There are indications that future earnings in this area will expand, particularly in view of Western countries' reluctance to provide full scale enrichment services to non-domestic users. Besides radioactive elements, ammonia is the other chemical commodity registering rapid earnings increases in the past 2-3 years. The principal market for Soviet ammonia has been the United States, which imports the product under a $20 billion deal negotiated between Occidental Petroleum and the U.S.S.R. U.S. exports over the 20 year period (1978-1997) covered by the deal consist of $10 billion in superphosphoric acid and technology and equipment for a fertilizer complex. Payment of $10 billion is being made primarily by imports of Soviet ammonia and some urea and potash. Imports by the United States began coming on stream in 1978 as 350,000 tons of ammonia, worth $27 million came into the country. In 1979, the value of ammonia imports rose to $69 million and can be expected to increase again in the future as import levels rise to the contracted 2.1 million tons per annum. U.S. ammonia producers, claiming that the Soviets were dumping the product at below market prices, petitioned the ITC to review the case and determine whether there was injury to the U.S. industry. The ITC ruled that there was indeed injury and set forth an import quota on ammonia from the Soviet Union. This decision was later overturned and ammonia imports have for the most part come into this country unimpeded.

Future hard currency earnings from chemicals will to a large degree be generated by exports arising out of compensation agreements such as the Soviet-Occidental arrangement. Over the last several years the Soviet chemical industry imported about $3.2 billion in equipment to be financed by product buyback. Among Soviet export commodities potentially coming on stream from these arrangements are a variety of petrochemicals. The amount of hard currency earned from these exports will be determined by demand and price on Western markets. In the near term, earnings will probably be constrained by weak prices. Given the over-capacity in the Western chemical industry, the increasing capacity of OPEC countries and LDC's, and uncertainties about economic conditions, prices are likely to remain soft into the 1980's. And finally, as already seen in the Occidental Petroleum deal, chemicals could evoke Western protectionism, thereby limiting the amount of exports that can be marketed in the Industrialized West.

Diamonds. Non-metallic mineral manufactures, of which 98 percent are non-industrial diamonds, was the fourth ranking hard currency earner in 1979 with exports valued at $1 billion. Major importing countries have been the United Kingdom and Belgium, which have absorbed over 80 percent of Soviet diamond offerings in recent years.

Soviet diamond sales consist mainly of rough stones. de Beers handles these exports through its London based Central Selling Organization (CSO). The CSO guarantees fixed prices to producers even when the market is soft by controlling the volume available to the diamond cutting market. (Despite this market distortion, prices are currently weak, and will limit hard currency earning potential in the near future.)

In addition to large exports of rough stones, the Soviets have been expanding their exports of finished diamonds. Cutting expertise gained from the Belgians has enabled the Soviets to produce fine quality gems that are competitive on Western markets. There are indications, however, that Soviet gem cutters still lack important cutting techniques, with the result that they use far larger amounts of rough stone than used by Western cutters to produce the same gems. Overall, cut diamond exports are still relatively small, and given the technical shortcomings and absence of an effective marketing strategy, will probably take some time to expand into established Western markets.

Nonferrous Metals. Nonferrous metal exports, at $746 million in 1979, were the fifth largest among Soviet exports at the two-digit SITC level of aggregation (table A-11). About 4 percent of hard currency earned from the Industrialized West came from the nonferrous metals group—platinum, aluminum, nickel and copper—which was about equal to earnings from exports of coal.

After performing poorly for several years, 1979 earnings from nonferrous metals increased 41 percent over the levels of the previous year. Gains from sales of platinum led the rise while earnings from nickel accounted for the remaining increase. Hard currency proceeds from exports of aluminum and copper, however, decreased in 1979.

The outlook for export earnings from the nonferrous metals group in the next five years is mixed. Western demand for metals is sensitive to economic conditions and there are supply constraints as well.

The Soviet Union has vast supplies of nonferrous metals. The difficulty rests, however, in the need to move into East and North Siberian regions to mine the metals. In an effort to speed up development of large reserves in areas where expense is substantial, the Soviets have on occasion turned to the West. One such instance is the Soviet approach to Japan to develop the large Udokan copper reserves. Though the Soviets have not been successful in finalizing any large development projects, should they negotiate any such deals, exports of associated nonferrous metals would increase significantly. Without Western developmental participation, it is likely that growth in hard currency earnings on the nonferrous metals account will be moderate.

Cotton. Another export group, textile fibers, earned the Soviet Union a significant $430 million in 1979. Ninety percent of this category's earnings came from cotton exports.

Hard currency gains from cotton exports have been declining since 1977. While Soviet production has been expanding moderately, the amount of cotton demanded on Western markets has been constrained by slow Western economic activity. Therefore, in expectation of continuing sluggishness of Western markets, earnings from cotton exports are likely to decline, or at best, stagnate. Nonetheless, the Soviets will probably maintain their position as a major world cotton exporter and are likely to continue to gain about 2 percent of total hard currency earnings from the Industrialized West through exports of cotton.

Finished Manufactures. The dollar value of finished manufactures exports rose slowly in the seventies. Earning $761 million in 1979, they accounted for about 4 percent of hard currency earned from the Industrialized West.

By and large, the finished manufactures export profile showed little variation in the 1970's. Only three commodities appeared with some consistency. These are passenger cars, ships and boats, and machine tools.

The Soviets have made a concentrated drive to capture a larger share of the Western automobile market. Global exports more than quadrupled from 84,000 units in 1970 to 379,000 in 1979. About 20–25 percent of Soviet car exports are now exported for hard currency; in 1979 among major Industrialized Western countries importing Soviet cars were Great Britain (22,000), France (18,000), Belgium (16,000), and Canada and West Germany (7,000 each). Plans to penetrate the U.S. market have been in the talking stage for several years.

About two-thirds of cars exported by the Soviets have been the Lada, an automobile whose manufacture is based on the Fiat 124 design. In the earlier seventies, the Soviets imported Fiat technology and equipment for production of 600,000 cars per year, installing the plant at Togliatti on the Volga. The production coming on stream from this site contributed significantly to the growth in Soviet passenger car export capacity. The Lada is a well constructed automobile yet priced at about 75 percent of similar Western models. Despite this, it is already less competitive as its design becomes outdated. Growth in hard currency earnings from Lada exports will continue, but only moderately.

In 1979, the Soviets introduced the Niva, a new competitor on Europe's expanding four-wheel-drive market, but the number exported was small. Moscow hopes the Niva will fill a gap in the West between low priced and expensive four-wheel drive vehicles. Recalling Soviet success in using a similar strategy when marketing their tractors in the early seventies, the Soviets may enjoy some success with the Niva.

Looking beyond the Lada and the Niva, the Soviets have within the last two years approached several Western car manufacturers about restructuring the Soviet "Moskvitch". The Soviets have proposed that a significant portion, perhaps as much as one-third, of annual production be taken back by the participating Western firm as payment for equipment and technology used in the car's manufacture. Perhaps for this reason, Western response has been lukewarm.

When comparing Soviet car export volumes to those of traditional automobile exporting countries, Soviet exports are very small, and the Soviet share of the Western import market is insignificant. To the Soviets, however, passenger car exports are important perhaps as much for their psychological value as for their foreign exchange worth. Insofar as finished manufactures, this is an area where the Soviets have achieved some success on Western markets—and given the small base from which they are starting—even a moderate penetration of Western markets will raise hard currency earnings enough to noticeably increase the rank of passenger cars among top hard currency earning commodities.

Hard currency earned from exports of ships, boats, and special purpose vessels has increased in recent years but does not represent a permanently growing source of foreign exchange. The modest Soviet merchant shipbuilding industry is capable of mass producing some standardized ship models and it is these that find their way as marginal exports to the West. The industry is not geared for expansion into exports as permanent production, and while hard currency earned from this source may increase in years to come, it will not signal the emergence of an export oriented industry.

Another commodity that does not appear in the data in table A-11 but which has been a consistent, albeit small, export from the Soviet Union is machine tools. Machine tools have had an erratic performance record as hard currency earning commodities. Export earnings increased steadily through 1976, then dropped back to earlier levels from which they have yet to recover. In 1979 their earnings represented 4 percent of Soviet hard currency gained from exports of manufactured goods.

The Soviet Union is the world's largest producer of machine tools. Production, however, is geared to serial output of relatively simple-to-produce, general purpose machine tools. Output of more complex models is limited and of poor quality. In fact, the Soviets imported specialized machine tools on a large scale throughout the seventies.

Although Soviet sources have claimed that substantial changes are to take place in the structure of the machine tool industry, judging from the performance record it does not seem likely. A Western study of the Soviet machine tool industry concluded that the Soviets actually appear to have abandoned efforts aimed at improving the technological level of the industry and have resigned themselves to the necessity of importing more sophisticated products.[8]

Soviet earnings from machine tool exports to the Industrialized West can be expected to remain small and erratic and will not contribute, to any significant degree, to Soviet efforts aimed at improving the export performance of their manufactured products sector.

In an effort to further diversify hard currency manufactures exports the Soviets have also been promoting sales of televisions, cameras, and watches. Although the quality of some of these items may be comparable to that of Western products, penetrating established markets will be difficult, particularly without the advantage of lower prices and an absence of a strong marketing program.

---

[8] Grant, James. "Soviet Machine Tools: Lagging Technology and Rising Imports", in *Soviet Economy in a Time of Change*. A Compendium of Papers Submitted to the Joint Economic Committee, Congress of the United States, Washington, D.C., October 1979.

Overall, the near to medium term outlook for hard currency earnings based on exports of finished manufactured commodities is not good. The commodities in which the Soviets have gained some export strength have been those mass produced on a large scale. In a world where technology is becoming increasingly complex and where competitiveness is frequently measured in terms of ability to meet specialized needs, the Soviets will fall behind as they are unable to make the frequent adjustments necessary to remain competitive. Furthermore, among the commodities that have been representative of Soviet manufactured goods exports there have been consistent problems of quality and style as well as spare parts shortages and lack of after-sales service. To overcome some of these barriers, the Soviets have at times used price discounting; this has its dangers because it may evoke Western import restrictions. In conclusion, it does not seem likely that finished manufactures will contribute significantly more to total hard currency earnings than the 3–4 percent they have thus far.

Summary and Outlook. The Soviet Union has not been a major exporter to the Industrialized West. Less than 2 percent of the Industrialized West's global imports were supplied by the U.S.S.R. in 1980. Although the share of Soviet exports destined to the West increased in the 1970's, communist countries still absorb the major portion of exports from the Soviet Union. In 1979, Soviet exports to the Developed West were valued at about 70 percent of Soviet exports to communist countries.

Much of the 1970's growth in dollar earnings from the Industrialized West was based on oil exports. While the value of oil earnings escalated precipitously, much of it was based on price increases. In view of the expected decline in the volume of oil available for export, future hard currency gains on this account will be dependent upon increases in price. By current trends, significant rises in oil prices are unlikely. Gas exports, the fastest growing energy export, will continue to rise very rapidly, especially so after 1985, when deliveries from the Northern Gas Pipeline project come on stream. Earnings from gas, however, will not soon offset the expected declines from earnings on oil.

The bulk of remaining Soviet export commodities fall within the raw materials group whose value, including oil, has comprised about three-fourths of the value of Soviet hard currency exports to the Industrialized West in recent years. In addition to oil, wood, coal, diamonds, cotton, and nonferrous metals have been leading hard currency earners. For the most part, these commodities are in ample supply in the U.S.S.R. The drawback however, is that it becomes increasingly necessary to move further into the northern and eastern parts of Siberia for increments to production. There climatic conditions are prohibitive, equipment inadequate, infrastructure absent, labor in short supply, and transportation, if available, inefficient.

Furthermore, even if rapidly rising supplies of raw materials were available for export in the future, Soviet hard currency earnings could be constrained by Western economic conditions as they affect the demand for these basic commodities. Thus, gains in hard currency from non-energy raw materials are likely to be moderate through 1985.

Hard currency gains from semi-processed products such as chemicals will also be moderate. The Soviets have negotiated a number of compensation arrangements which call for a significant volume of chemical exports. These were to begin coming on stream in 1980. Weakened prices on Western markets may keep earnings from gaining their full potential, while the looming threat of Western import protectionism could dampen development of chemicals as an export commodity.

Soviet export performance is likely to be weakest in the area of finished manufactures. Although finished manufactures have been a rising source of hard currency in exports to the LDC's, on Western markets they have been seriously hampered by what have become characteristic problems of style and quality; poor after-sales service and inadequate spare parts have simply compounded the problem.

Compensation arrangements represent a growing source of foreign exchange for the Soviet Union.[9] These are agreements negotiated between the Soviets and foreign firms; they call for Soviet import of plant and equipment to be paid for by exports from the completed facility. Compensation arrangements that involve exports of coal, gas, chemicals, and timber are expected to add a substantial layer to Soviet hard currency earning capability and will soften the effect of the decline in oil export earnings.

The following scenario has been developed to estimate Soviet hard currency earnings from the Industrialized West between 1981 and 1985. Nonenergy exports are estimated to increase 10 percent annually (excluding growth in compensation arrangement exports which are shown separately). Oil exports are projected to decline in volume by 10 percent each year, with prices stable at the 1982 level of $34/bbl through 1985. Gas earnings are estimated to be $5.0 billion by 1985, rising continuously until then.

An additional $1 billion by 1985 is estimated as an added layer to exports rising out of compensation deals.

Given these assumptions, by 1985 it is expected that Soviet hard currency earnings from exports to the Industrialized West will be nearly $27 billion (Table T-3), increasing at an effective 2.6 percent average annual rate of growth from 1980. This compares with an average annual rate of growth of 13 percent during 1974–79. If the volume of oil exports decreased by less than 10 percent per year, and/or if oil prices rise, then the Soviet hard currency earnings position would be stronger. The best case scenario would be one in which the volume of oil exports remains at 1980 levels. With oil price constant at 1982 levels, hard currency earnings from merchandise trade could rise to $32.5 billion. On the other hand, if the volume of oil exported drops dramatically (10 percent/annum in 1981 and 1982, 20 percent in 1983, 1984, and 1985) then 1985 hard currency earnings would increase to $24.5, slightly higher than they were in 1980. These estimated levels of hard currency earnings are meant to be rough figures defining only possible magnitudes of earnings.

With oil the key variant, it is noteworthy that the Soviet 11th FYP calls for a moderate increase in oil production, which would bode

---

[9] For a thorough treatment of compensation arrangements see Barclay, Dennis J. "U.S.S.R.: The Role of Compensation Agreements in Trade with the West." in *Soviet Economy in a Time of Change*, A Compendium of Papers submitted to the Joint Economic Committee, Congress of the United States, Washington, D.C., October 1979.

TABLE T-3.—SOVIET EXPORTS TO THE INDUSTRIALIZED WEST: 1980 AND ESTIMATES FOR 1981–85[1]

[Billions of current U.S. Dollars]

	1980	1981	1982	1983	1984	1985
Nonenergy	7.6	8.4	9.2	10.1	11.1	12.2
Energy	16.1	16.3	15.5	14.8	14.2	13.7
Compensation arrangements	([2])	.6	.7	.8	.9	1.0
Total	23.7	25.3	25.4	25.7	26.2	26.9

[1] Nonenergy exports increase 10 percent per year. Oil exports to decline 10 percent per year in volume. Oil prices remain at 1982 level of $34/bbl. Gas earnings are $5,000,000.000 by 1975. Added layer of compensation arrangements as shown 1981–85.

[2] Earnings from compensation arrangements are included in data for energy/nonenergy trade.

well for oil exports. Western sources, however, generally agree that Soviet oil production will decline; only the timing and rapidity of the decline are subject to interpretation.

The remaining unknown is conditions in Western economies. If there is wide-scale improvement, then demand for Soviet raw material exports will be stimulated, prices will rise, and hard currency earned on those accounts will increase significantly. If, however, economic growth remains sluggish, then demand will be, at best, moderate and foreign exchange earnings will register a similar performance.

CHAPTER IV. U.S.S.R. TRADE WITH THE INDUSTRIALIZED WEST THROUGH 1985

Soviet trade turnover with the Industrialized West was $43.5 billion in 1980. Imports stood at $19.8 billion and exports at $23.7 billion, netting the Soviet Union a surplus of $4 billion. The level of 1980 imports represented an average annual growth rate of 19 percent since 1974. For the same period, exports to the Industrialized West increased at a rate of 20 percent each year.

Had exports risen more rapidly during the 1974–79 period, it is likely that the import growth rate would have been higher. Export performance, therefore was a constraining factor on overall trade with the West. Future trade with Industrialized Western countries will likewise be tempered by Soviet ability to export, particularly oil. Three approaches for assessing oil export potential are presented in this paper.

The first is to assume that oil exports will decline in volume from 1980 levels by 10 percent annually while prices is held at 1980 levels. This is in part realistic as Soviet oil exports, after peaking in 1978 and 1979, declined by at least that amount in 1980.

The second approach is to assume that oil export volumes will remain at their 1980 levels through 1985 (price constant). This is a best case scenario.

The third and most pessimistic approach is built most directly on CIA projections. It assumes a 10 percent decline in the volume of oil exported in 1981 and 1982, and a more rapid 20 percent per annum decline for the 1983–85 period. The levels of Soviet exports to the Industrialized West and the commodity breakdowns for each of the three possible scenarios for oil are presented in table T-4.

TABLE T-4.—1985 SOVIET EXPORTS TO THE INDUSTRIALIZED WEST UNDER VARYING ASSUMPTIONS

[Dollar amounts in billions of U.S. dollars]

SITC	Description	1980		1985 [1]		1985 [2]		1985 [3]	
		Value	Percent	Value	Percent	Value	Percent	Value	Percent
0, 1, 4	Foodstuffs	$0.2	1.0	$0.3	1.1	$0.3	0.9	$0.3	1.2
2	Crude materials	2.6	11.1	3.6	13.4	3.6	11.1	3.6	14.7
3	Mineral fuels	16.1	67.9	13.7	51.0	19.3	59.4	11.3	46.1
5	Chemicals	1.3	5.5	3.2	11.9	3.2	9.8	3.2	13.1
6	Basic industrial goods	2.5	10.7	4.2	15.6	4.2	12.9	4.2	17.1
7	Machinery, transport equipment	.6	2.4	1.3	4.8	1.3	4.0	1.3	5.3
8	Miscellaneous manufactured goods	.1	.5	.3	1.1	.3	.9	.3	1.2
9	Commodities m.e.c. [4]	[4].2	1.9	.3	1.1	.3	.9	.3	1.2
	Total [5]	23.7		26.9		32.5		24.5	

[1] Nonenergy (excluding compensation arrangement exports) exports increase 10 percent annually, 1980–85. Oil decreases 10 percent per year in volume. Oil price constant at 1982 level of $34/per barrel. Gas earnings are $5 billion in 1985.

[2] Same as footnote 1, except that volume of oil exported remains at 1980 levels.

[3] Same as footnote 1, except that volume of oil exported declines 10 percent per annum in 1981 and 1982 and 20 percent per annum in 1983, 1984, and 1985.

[4] Includes gold sales to the U.S. of $1 billion.

[5] Components may not add to totals because of rounding.

Scenario 1 demonstrates what would happen to hard currency earnings from the Industrialized West if oil export volumes decrease 10 percent annually while oil prices remained constant at 1982 levels ($34/bbl.). Exports in 1985 would reach $26.9 billion and their composition would be altered somewhat in response to lower oil earnings. Gas is estimated to earn $5.0 billion by 1985 or 19 percent of total hard currency earned from the Industrialized Western countries. This percentage contrasts with the 13 percent of 1980. Raw materials, instead of comprising 80 percent of the total value of exports as in 1980, would account for 66 percent. Intermediate products would gain in importance as chemicals and basic industrial goods account for nearly 28 percent of 1985 deliveries to the Industrialized West rather than the 16 percent recorded in 1980. Finished manufactures are estimated to rise marginally to comprise 6 percent of total exports. Compensation agreements would generate another $1.0 billion above that already included in product breakdowns; exports based on this trade would be primarily in timber, coal, and chemicals.

On the import side, the Soviets will continue to need Western grain. They will also need Western technology, machinery and equipment to compensate for diminishing returns on investment in labor and domestic capital. Especially large imports will be necessary for the Northern Gas Pipeline project.

Assuming the Soviets continue importing at the same rate as in the years 1974–80, i.e., at 18.9 percent per annum, then Soviet imports in 1985 would stand at $47.1 billion (table T–5, Scenario 1). Given the assumption that oil exports would decline moderately, exports will total $26.9 billion in 1985, leaving a shortfall of $20 billion. This would clearly be unacceptable to the Soviets. If the U.S.S.R. were to reach this level of importation, then to balance their trade accounts with the West, they would have to increase exports in the 1981–85 period at an average annual rate of 15 percent. This rate is well beyond the 2.6 average annual rate projected in this paper (under the assumption that the volume of oil exported would decrease 10 percent annually from 1980 levels). It is however, lower than the 20 percent average annual

T-5.—SOVIET TRADE WITH THE INDUSTRIAL WEST UNDER VARYING ASSUMPTIONS, 1980 AND 1985.

[In billions of current U.S. dollars]

	Scenario 1[1]			Scenario 2[2]			Scenario 3[3]			Scenario 4[4]		
	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
1980	23.7	19.8	+3.9	23.7	19.8	+3.9	23.7	19.8	+3.9	23.7	19.8	+3.9
1985	26.9	47.1	−20.2	26.9	34.2	−7.3	32.5	34.2	−1.7	24.2	34.2	−10.0

[1] Import growth rate is 19.8 percent annually; export growth rate is 2.6 percent annually.
[2] Import growth rate is 11.5 percent annually; export growth rate is 2.6 percent annually.
[3] Import growth rate is 11.5 percent annually; export growth rate is 6.5 percent annually.
[4] Import growth rate is 11.5 percent annually; export growth rate is 0.7 percent annually.

rate of the 1974–80 period when the volumes of oil and gas export were rising rapidly along with world prices for these commodities.

The alternative would be to constrain imports. If the Soviets moderated their import growth to 11.5 percent per year, (a rate slightly smaller than that of the 1976–79 period, reflecting declining machinery orders placed with hard currency countries since 1976) then 1985 imports would stand at $34 billion, about $7 billion higher than export earnings (scenario 2). This appears to be a goal for which the Soviets may strive.

The composition of imports would remain basically the same as in 1980 (table A–13). Basic industrial goods and machinery and transport equipment would comprise the largest portion of imports. This would reflect in part purchases for the Northern Gas Pipeline project much the same way purchases during the latter half of the seventies were earmarked for the Ohrenburg Pipeline. Grain imports, though rising, would comprise a smaller share of total imports than they did in 1980, reflecting weaker prices.

Other scenarios could unfold (table T–5). The Soviets might be able to maintain their 1980 level of oil exports through 1985 (scenario 3) Should this be the case, export earnings would sum to $32.5 billion. With imports at $34.2 billion, the Soviets would register a minor $1.7 billion deficit in trade with Industrialized Western countries.

It is also possible that oil export earnings will decline dramatically (scenario 4, table T–5). In this case, the Soviets would be in a difficult position by 1985, despite their moderate import growth of 11–12 percent per year. The 1985 deficit would be $10 billion, and though this might be acceptable for a single year it would be difficult to accept repeatedly, which would be the case if oil earnings eroded.

CHAPTER V. U.S.–U.S.S.R. TRADE POTENTIAL UNDER PRE-AFGHANISTAN[10] CONDITIONS

A. POTENTIAL COMPOSITION AND VOLUME OF U.S.S.R. EXPORTS TO THE UNITED STATES UNDER PRE-AFGHANISTAN CONDITIONS

Soviet exports to the United States were valued at $900 million in 1979 and accounted for less than 5 percent of total Soviet exports to the Industrialized West.[11] A few basic commodities dominated the trade. Except for non-monetary gold, which has appeared in trade data only since 1978 and fluctuates significantly, Soviet exports to the United States have consisted primarily of platinum, ammonia, gold coins, nickel, miscellaneous base metals, and chromium. The remaining export commodities have been fur skins, aluminum scrap, and diamonds. If non-monetary gold is excluded, these commodities accounted for 87 percent of the value of Soviet deliveries to the United States in 1979. Each of these exports is examined in greater detail below.

---

[10] "Pre-Afghanistan" conditions are defined in this paper as conditions prevailing prior to the existence of various U.S. sanctions against the U.S.S.R. since early 1980. This definition does not include MFN for the Soviets—a condition which could be observed as "favorable".

The commodity earning the largest dollar value from export to the U.S. was non-monetary gold. In 1979, sales were valued at $548 million—double those of 1978. Future exports are likely to fluctuate significantly as they did in the seventies. Should the 1979 performance be repeated, non-monetary gold exports could account for up to 60 percent of the value of total Soviet exports to the United States.

At $100 million, the export commodity earning the second largest dollar value from the United States was platinum. U.S. platinum imports from the U.S.S.R. have been erratic. Rising to $134 million in 1974, they fell steadily between 1975 and 1978, and then rose again in 1979, failing, however, to achieve the earlier high levels of 1974. The U.S. has absorbed about 25 percent of Soviet platinum offerings to the Industrialized West, and after Japan, has been the Soviet's second most important platinum market. Platinum will continue to be among the top Soviet export commodities to the U.S., though earnings from this commodity will probably fluctuate relative to demand and U.S. economic conditions.

Ammonia was the third largest commodity in dollar value terms exported by the Soviets to the U.S. in 1979. U.S. ammonia imports originated in the $20 billion deal between Occidental Petroleum and the Soviet Union. Imports of ammonia into the U.S. began in 1978 and will continue for the duration of the 20 year period for which the deal was negotiated. In 1978 the Soviets exported 305 thousand tons to the U.S. and in 1979 this amount rose to 777 thousand tons, valued at $56 million. The Soviet-Occidental agreement called for ammonia trade to increase to 2.1 million tons by 1980 and to remain at that level until 1997. The value of product to be delivered over the 20 year period is estimated at somewhat less than $10 billion.

Gold coins rank fourth among Soviet commodity exports to the United States. Their export has been erratic, but has earned as much as $26 million for the Soviets in a single year. The United States has been an important outlet for Soviet gold coins in that it has absorbed 50–90 percent of all coins exported to the Industrialized West in recent years. Gold coins are likely to continue to be exported to the U.S. in years to come, but it is not possible to predict their potential earnings.

In 1979, Soviet nickel exports to the United States amounted to $26 million, and were fifth among Soviet export commodities to this country. Earnings from nickel have fluctuated significantly; after gains of

---

[11] 1980 exports were $453 million, reflecting the negative effects of U.S.–U.S.S.R. political relations in that year. The trade analysis presented in this section is based on 1979 data, the last full year for which data is available on U.S.–U.S.S.R. trade in an atmosphere not affected by the sanctions imposed after the Soviet invasion of Afghanistan.

$40 million in 1974, earnings plunged in 1975 and remained low until 1978, when there was some recovery. By 1979, their value still fell short of 1974 levels. Future trade will in large part be affected by U.S. demand and recovery on the commodity markets.

Chromium and miscellaneous base metals have ranked next among imports by the U.S. from the Soviets. In 1979, each earned about $15 million. Since 1976 the United States has been the Soviet's largest market for miscellaneous base metals; chromium exports to the U.S. have amounted to about one-fourth of total Soviet chromium deliveries to the Industrialized West, except in 1979 when the U.S. took a 60 percent share. U.S. imports of both chromium and miscellaneous base metals should continue.

Data for 1980 indicate that Soviet exports to the United States declined by nearly one-half. Declines were evident in virtually all categories except chemicals, which registered a significant increase on the strength of expanded ammonia deliveries The fluctuating nature of non-monetary gold trade accounted for most of the decline (it is not clear if this decline was a negative result of poor political relations or if it was economically motivated) while depressed U.S. economic activity was the source of stagnancy in the trade of remaining commodities.

U.S. imports from the U.S.S.R. in 1981 (table A-14) show another decline from $453 million in 1980 to $347 million. The decrease is particularly evident in U.S. imports of non-monetary gold, which dropped in 1981 to $23 million. Other declines, such as in imports of basic industrial goods were likely the result of slowed U.S. economic activity. An interesting increase in U.S. imports of oil (table A-14. SITC 3) was probably a single erratic development, not likely to be repeated in years to come.

The Soviets frequently argue that an absence of MFN is basic to their poor export performance to the United States[12] What would happen with Soviet exports to the United States if trade relations were normalized and the U.S. granted MFN status to the Soviets? Trade could increase based on an expansion of commodities already exported to the U.S. and/or on an altered composition of exports to this country.

A particularly good study of this question found that if the Soviets had had MFN in the mid-seventies, exports to the U.S. would have been a minor 8-9 percent higher each year.[13] The increment in trade would have included traditional commodities exported to the U.S. as well as new commodities that would have entered the market as a result of MFN status.

The reason behind the overall low value of Soviet exports to the U.S. is that there is only a limited U.S. market for traditional Soviet export commodities. Either the U.S. is self sufficient, has traditional suppliers, or is itself an exporter of many commodities that represent Soviet export strength. A single exception upon which large U.S.-Soviet trade could be based is liquefied natural gas. United States LNG imports would be possible if the U.S. and the Soviet Union concluded a large compensation deal wherein the U.S. would participate in development of Siberian gas deposits and would be paid in kind with liquefied natural gas. The potential for this trade was examined in a separate paper; it was determined that there are many obstacles besides improved relations with the U.S.S.R. that must be overcome before such an arrangement could be viable, and that there is no potential for this within the 1985 time frame.[14]

---

[12] The Trade Act of 1974 established certain restrictions on U.S. trade with non-market economy countries. Section 402 (the Jackson-Vanik amendment), stipulates that communist countries not already receiving non-discriminatory tariff treatment at the time of the Act's entry into force will be ineligible for bilateral commercial agreements, Most-Favored-Nation tariff treatment, and official export credits and investment guarantees unless those countries permit free emigration. The President may waive this requirement if such a waiver and subsequent extension of MFN have the effect of improving emigration flows from the given countries. If MFN is extended under this clause, the renewal of the President's waiver authority must be approved annually by both Houses of Congress. The U.S.S.R. does not receive MFN treatment for its exports to the U.S. and is not eligible for Export-Import or CCC credits.

[13] Raffel, Rubin, Teal. "The MFN Impact on U.S. Imports from Eastern Europe", published in *East European Economies Post Helsinki;* A Compendium of Papers Submitted to the Joint Economic Committee of Congress. Washington, D.C. August, 1977.

We assume that Soviet exports to the U.S. through 1985 will continue to be comprised of generally the same commodities as in the seventies and that trading relations (to pre-Afghanistan status) would not significantly affect this commodity structure. A projection incorporating these assumptions yields $1000 million in 1985 Soviet exports to the U.S. (table A–14). The most significant increase would be apparent in U.S. imports of chemicals, which would rise from $81 million in 1979 to $450 million by 1985. This escalation is attributable to large U.S. ammonia imports which are part of the Soviet-Occidental deal.

A high range estimate is offered to account for several possible conditions (table A–14). If the U.S. economy exhibits improved demand for traditional Soviet export commodities and if U.S.-U.S.S.R. political relations improve markedly, Soviet exports could be diverted from other Industrialized West markets to the United States. Given such an optimistic scenario, U.S. imports from the U.S.S.R. could rise to $1.7 billion by 1985. The U.S. share of imports among all Industrialized Western countries would equal about 6 percent which would be a higher percentage share than that in any year previous. Accounting for this would be sizeable U.S. imports of nonmonetary gold and ammonia. It is this author's conclusion, however that this scenario is not likely to unfold in the next few years and that trade will continue on trend, yielding, at best, $1000 million in Soviets exports to the U.S. by 1985.

B. POTENTIAL COMPOSITION AND VOLUME OF U.S.S.R. IMPORTS FROM THE UNITED STATES

U.S. exports to the Soviet Union in 1979 totaled $3.6 billion and amounted to 20 percent of all Industrialized West exports to the U.S.S.R. in that year. Sanctions imposed on this trade in response to the Soviet invasion of Afghanistan resulted in exports declining to $1.5 billion in 1980, less than half the amount of the year previous and about one-third of what they would have been had no sanctions been imposed. Exports recovered somewhat in 1981, but were still only two-thirds of those in 1979. (Data for 1979 is used in subsequent analysis as that was the last full year of U.S.-U.S.S.R. trade not affected by the Afghanistan-related sanctions.)

---

[14] Lenz, Allen, "The LNG Projects—Neglected Keystone of A U.S.-Soviet Economic Interdependence", Office of East-West Policy and Planning, Project No. D–58–78.

The composition of exports to the Soviets has been heavily in favor of agricultural commodities (table A–14). With increasing grain shipments during the second half of the 1970's, agricultural commodities comprised approximately three quarters of total U.S. shipments to the U.S.S.R. toward the end of the decade. Wheat, corn and soybeans were the principal agricultural commodities exported.

As a result of the sanctions, the United States suspended shipment of commodities that could support the Soviet livestock feed program. These included wheat, feed grains and seeds, soybeans, and animal feeds. Also prohibited were commodities that could be used to replace livestock products, e.g. animal fats. Throughout 1980 and the four months before the sanctions were lifted in 1981, exporters were required to obtain licenses to ship any of these products. The U.S. Government validated only those licenses necessary to satisfy the 8 million metric tons of grain that the U.S. was obligated to sell the Soviets each year under the U.S.-U.S.S.R. Grains Agreement that extended to September 1981 and which has now been renewed for one additional year. An agriculture related product, phosphoric acid, was also placed on the export control list. Phosphoric acid exports were part of the $20 billion deal between Occidental Petroleum and the U.S.S.R. in which the U.S. was to export phosphoric acid in return for imports of ammonia, urea, and potash. Phosphoric acid exports totaled $93 million in 1979 and were expected to climb to $400 million in 1980. As a result of the restrictions, their 1980 export value was only $17 million. In 1981, however, they recovered substantially, exceeding levels of any year previous.

The other category of goods which figured prominently in the export trade between the U.S. and the U.S.S.R. was machinery and transport equipment. This category accounted for 11 percent of the value of 1979 U.S. shipments to the U.S.S.R. Table T–6 lists the major items comprising the machinery and transport equipment group. Pumps and construction and mining equipment were commodities with the largest export value.

Other equipment in the machinery group consisted of lifting and loading machinery, motor vehicle parts, and power generating machinery. The remaining commodities were electrical measuring and controlling instruments, tractors, and non-electric statistical machines.

As a result of the sanctions, many products falling in SITC categories 5–8 (table A–14) were placed under export control. Techni-

TABLE T–6.—*U.S. exports of machinery and transport equipment to the U.S.S.R., 1979*

	Millions of U.S. dollars
Total machinery and transport equipment	**$384**
1. Pumps	**91**
2. Construction and mining equipment	**69**
3. Lifting and loading machinery	**36**
4. Motor vehicle parts	**35**
5. Power generating machinery	**30**
6. Electrical measuring and control instruments	**23**
7. Tractors	**19**
8. Statistical machines, nonelectric	**19**
Subtotal	**$322**
Percent of total	**84**

cally only high technology products whose export could contribute significantly to Soviet military potential and products aiding development of the oil and gas industries were subject to control. The change in U.S. policy toward export of manufactured goods was that the definition of high technology had been broadened to include commodities which prior to the invasion of Afghanistan did not require validated licensing.

The effects of the sanctions on U.S. trade are visible in U.S. export figures for 1980. The largest decline was in agricultural products (including soybeans) which decreased from about $2.4 billion in 1979 to about $1 billion in 1980. Another significant decrease was apparent in chemicals which declined from $136 million to $31 million, reflecting the falloff in phosphoric acid exports. Due to more rigid restrictions on high technology exports and on oil and gas equipment deliveries, machinery and transport equipment declined from $384 million to $269 million.

With the agricultural sanctions lifted, U.S. exports in 1981 rebounded from the 1980 low of $1.5 billion to $2.3 billion (table A–14). Much of the improvement is evident in larger grain and chemical exports.

Future U.S. exports to the Soviet Union will in large part be determined by political relations between the two countries. With the agricultural sanctions lifted, significant improvement in U.S. exports to the Soviets over 1980 levels was evident. The recent economic sanctions imposed on the Soviets for their role in the Polish crisis are not expected to affect exports significantly.

The largest improvement, in trade over 1980 levels came from President Reagan's lifting the agricultural sanctions. Future exports from the U.S. to the U.S.S.R. could climb to $4.2 billion by 1985 with free trade in grain. It has been estimated that in the long term the Soviets will be in the market for about 25 mmt of grain annually.[15] Assuming they import this amount in 1985, and that the U.S. supplies about half, then U.S. grain exports would be valued at about $2.3 billion. Adding to the increases of products in other categories would bring U.S. exports to $4.2 billion by 1985.

In the unlikely event that relations between the U.S. and the U.S.S.R. improve markedly, exports could rise to $5.8 billion with the increase led by larger sales of U.S. grain. It is important to note that additional Soviet purchases of U.S. grain would certainly occur in an atmosphere of heightened good will between the two countries, but could also occur in an atmosphere where relations were poor, but not marked by U.S. agricultural sanctions. This assumption is based on the premise that the Soviets will need grain to support their meat program for the 11th Five Year Plan. Beyond grain, exports from the United States to the U.S.S.R. would not increase significantly in an atmosphere of positive U.S.-Soviets relations because the Soviets have established strong commercial ties with other Industrialized Western countries from which they will continue to import the major share of their non-agricultural products.

---

[15] For a thorough discussion of Soviet grain needs, see "U.S.S.R.: Long Term Outlook for Grain Imports", CIA Publication No. ER79–10057. January 1979.

C. GENERAL ASSESSMENT OF U.S.-U.S.S.R. TRADE COMPLEMENTARITY

There is no doubt that the Soviet Union needs the grain and technical products that the U.S. offers for export. It has also been long assumed that because the Soviet Union is an exporter of natural resources and the United States a large consumer of these, that there is a natural complementarity of trade between the two countries. As the world's largest economy and largest importer, the U.S. would appear to be a market of primary importance to the Soviets. Analysis, however, indicates that the U.S. market is unlikely to be of great importance to the Soviet Union through 1985.

The Soviet Union's most important exports, oil and oil products would find a ready market in the U.S. However, Soviet oil and oil products will probably be supply constrained within the next five years. Hence, there is virtually no likelihood of a significant trade in these products with the U.S.

Natural gas has risen steadily in importance as a Soviet export and will probably become the most important export commodity by 1985. Natural gas in liquefied form would find the U.S. market a suitable outlet, but at the present many obstacles remain before the U.S. and the Soviet Union could embark on a deal the magnitude of which would be required to develop LNG trade. If, however, a search were made for areas of U.S. import-Soviet export compatibility, liquefied natural gas would be a primary candidate.

Coal, another major Soviet export, does not have a significant U.S. market because the U.S. is itself an exporter. The case is similar for chemicals and cotton, which are also among the Soviet Union's top exports.

The Soviet Union is one of the world's largest exporters of wood and wood products. These have little potential on the U.S. market which has its own vast reserves and has an additional convenient source for raw materials and products from Canadian forests.

Metals, chiefly platinum, aluminum, copper, nickel, and chromium are major Soviet exports to the West. Sizeable amounts of platinum, nickel, and chromium are already imported into the United States. Prospects for expanding exports of these and the remaining metals to the United States do not appear favorable. This judgment reflects the existence of alternate markets for the U.S.S.R., and competing suppliers for the United States, as well as production difficulties in the Soviet Union associated with moving extraction centers further eastward.

Diamonds are the remaining commodity which figures prominently in the Soviet export commodity profile. There is a significant diamond import market in the United States. The Soviets, however, have preferred to market their diamonds through de Beers, the London based diamond monopoly. Therefore, it is not likely that the United States and the Soviet Union could enter into a dynamic diamond trade, leaving opportunities for future expansion of this trade limited.

Finished manufactured goods, are most unlikely to be a major factor in Soviet exports to the West through 1985. Nevertheless, because the United States market offers such large potential, the Soviets appear to see it as very important to their longer term export plans. However, they also see the U.S. market as remote, geographically dispersed and probably the most difficult in the West to enter. Although the U.S. granting MFN to the Soviets would be helpful to exports of manufactures, it would not make a significant difference. The main constraint on Soviet exports of manufactures to the United States is not an absence of MFN but problems of product style, quality, serviceability, and marketing.

CHAPTER VI. PROJECTED 1985 U.S.-U.S.S.R. TRADE UNDER ALTERNATIVE SCENARIOS

Projections of future trade between the U.S. and the U.S.S.R. are useful primarily for gaining insights into the variables that will affect that trade in years to come. The single most important variable will be the status of the political relations between the two countries. Were the relationship to continue on the course it took during 1980, our trade with the Soviets would be severely restricted. Now that the grain and agricultural goods embargoes have been lifted, trade will expand but will be limited ultimately by economic conditions affecting that trade.

Presented in table A-14 are two alternative scenarios for U.S.-U.S.S.R. trade. The first scenario projects trade taking into account improved relations as a result of lifting the agricultural embargo. The second scenario and high range estimate for trade is predicated on the assumption that relations between the U.S. and the U.S.S.R. improve markedly. No projections are made to incorporate the effects of the recent sanctions imposed for Soviet involvement in the Polish crisis; it is this author's opinion that the sanctions' effects on U.S.-U.S.S.R. trade will not be significant.

With agricultural sanctions lifted, 1985 trade turnover could reach about $5.2 billion. U.S. exports could total $4.2 billion, with 55 percent comprised of agricultural commodities. This assumes that the U.S. would provide the Soviets with about 13 mmt of grain, and that grain prices would rise 5 percent per annum.

Also built into the projection is a significant increase in exports of chemicals, which are estimated to yield about $400 million by 1985. Basic to this projection is the assumption that phosphate exports will continue to proceed unimpeded and that the potential volume of exports arising out of the Occidental Petroleum deal will be realized. Other U.S. exports are slated to show moderate gains, reflecting their moderate growth in recent years.

A high range estimate is offered in the event that relations between the U.S. and the U.S.S.R. improve markedly. In this unlikely event, U.S. exports could total $5.8 billion, fueled in large part by expanded grain exports. The assumption is that under very favorable conditions, the Soviets would source most of their grain import needs in the U.S. Exports of other commodities would rise only moderately on the notion that the export trade structure could not change significantly within the next few years, and that the Soviets would continue to import the major portion of non-agricultural commodities from traditional sources. On the U.S. import side, the value of commodities imported could rise to $1.7 billion, reflecting significant gains in all categories. This assumes that the U.S. economy improves notably and that there is a substantial diversion of exports from other Industrialized West countries.

The conclusion that can be derived from both the low and high range estimates is that regardless of how large our trade with the Soviets becomes, the U.S. will run a significant surplus. This imbalance rests in the recognition that while we have a potentially large store of goods that we could sell to the U.S.S.R., the Soviets have only limited export offerings for U.S. markets.

TABLE A-1.—U.S.S.R. FOREIGN TRADE BY MAJOR TRADING GROUPS, 1960–80

[Dollar amounts in millions of U.S. dollars]

	1960		1970		1974		1978		1979		1980	
	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total	Amount	Percent of total
Imports	$5, 623		$11, 720		$24, 861		$50, 795		$57, 961		$68, 477	
Of which:												
U.S.S.R.	NA		NA		NA		NA		NA		NA	
East Europe	2, 792	49. 7	6, 627	56. 5	11, 352	45. 7	24, 661	48. 6	26, 751	46. 2	29, 407	42. 9
Developed countries	1, 098	19. 5	2, 814	24. 0	8, 092	32. 5	16, 228	31. 9	19, 718	34. 1	24, 211	35. 4
Less developed countries	547	9. 7	1, 275	10. 9	3, 183	12. 8	4, 072	8. 1	5, 442	9. 4	7, 842	11. 5
Exports	5, 558		21, 787		27, 374		52, 393		64, 913		76, 470	
Of which:												
U.S.S.R.	NA		NA		NA		NA		NA		NA	
East Europe	3, 071	55. 3	6, 752	52. 8	11, 491	42. 0	24, 910	47. 5	28, 380	34. 7	32, 216	42. 1
Developed countries	996	17. 9	2, 414	18. 9	8, 226	30. 1	12, 932	24. 7	19, 586	30. 2	24, 427	31. 9
Less developed countries	353	6. 4	2, 014	15. 8	4, 507	15. 5	8, 219	15. 7	9, 175	14. 1	10, 579	13. 8

Source: CIA, Handbook of Economic Statistics (ER 80 10452), October 1980 and Handbook of Economic Statistics (NF HES 81–001), November 1981.

TABLE A-2.—U.S.S.R. HARD CURRENCY TRADE, 1970-80 [1]

[In millions of U.S. dollars]

	1970	1974	1975	1976	1977	1978	1979	1980	Average annual growth rate, 1974-80
Imports	2, 701	8, 448	14, 257	[2] 15, 316	[2] 14, 645	[2] 16, 951	21, 334	26, 247	20. 8
Exports	2, 201	7, 470	7, 835	9, 721	11, 345	13, 157	19, 246	23, 792	21. 3
Trade turnover	4, 902	15, 918	22, 092	25, 037	25, 990	30, 108	40, 580	50, 039	21. 0
Balance	−500	−978	−6, 422	−5, 595	−3, 300	−3, 794	−2, 088	−2, 455	NA

[1] Vneshnaya Torgovlya SSSR, 1970-79. 1980 data from estimates in Handbook of Economic Statistics, 1981. National Foreign Assessment Center, Central Intelligence Agency. Publication No. NF HES 81-001, November 1981.

[2] Includes the following amounts, which the U.S.S.R. reported via footnotes, as imports associated with the Orenburg natural gas pipeline:

1976	$420 million
1977	$888 million
1978	$286 million

These imports consisted largely of large diameter pipe.

TABLE A-3.—U.S.-U.S.S.R. TRADE 1974-81

[Millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1981
U.S. exports	607.4	1,832.7	2,305.9	1,623.5	2,249.0	3,603.6	1,509.7	2,338.6
Of which:								
Agricultural	300.0	1,136.0	1,487.0	1,036.8	1,686.5	2,854.9	1,047.1	1,665.0
Manufactured [1]	293.4	670.2	794.1	547.3	466.9	655.8	423.5	559.0
Other	14.0	26.5	24.8	39.4	95.6	92.9	39.1	114.6
U.S. imports	349.5	254.2	220.6	234.3	253.8	324.3	452.9	347.4
Of which:								
Agricultural	9.9	8.4	8.8	13.3	12.6	14.1	8.2	12.9
Manufactured [1]	222.3	113.9	111.2	108.9	150.4	261.2	320.6	186.9
Other [2]	117.3	131.9	100.6	112.1	90.8	49.0	124.1	174.0
Trade turnover	1,400.9	956.9	2,526.5	1,857.8	2,502.8	3,927.9	1,962.6	2,686.0
Balance	+973.3	+257.4	+2,085.3	+1,389.2	+1,995.2	+3,279.3	+1,056.8	+1,991.1

[1] SITC 5-8.

[2] Largely mineral ores, gasoline, metallic waste and alcoholic spirits.

Source: U.S. Census Bureau magnetic tapes.

TABLE A-4.—U.S.S.R. HARD CURRENCY DEBT

[Millions of U.S. dollars]

	1971	1975	1976	1977	1978	1979	1980
Commercial debt	407	6,974	9,667	9,858	9,500	10,500	10,800
Owed to U.S. banks	(1)	1,000	1,500	1,600	1,185	679	482
Officially backed debt:							
Guaranteed export credits	1,400	3,631	5,185	5,870	6,911	7,800	8,200
U.S. Eximbank	(1)	461	460	456	455	445	431
CCC credits	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Gross debt	1,807	10,578	14,852	15,728	16,600	17,200	19,000
Commercial assets	(1,225)	(3,127)	(4,738)	(4,498)	(6,000)	(8,100)	(8,600)
Net debt	582	7,451	10,114	11,230	10,600	9,100	10,400

[1] Not available.

Source: U.S. Government. Does not include borrowings of IIB, IBEC.

TABLE A-5.—U.S.S.R. TRADE WITH THE INDUSTRIALIZED WEST (IW)[1] AND UNITED STATES, 1974-80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980
Imports from IW	$7,032	$11,867	$12,938	$12,914	$14,870	$18,114	$19,837
United States	$608	$1,834	$2,306	$1,624	$2,249	$3,604	$1,510
U.S. Share (percent)	8.6	15.5	17.8	12.6	15.1	19.9	7.6
European Community	$3,980	$6,090	$5,759	$6,680	$7,173	$8,649	$10,433
European Community (percent)	56.6	51.3	44.5	51.7	48.2	47.7	52.6
Of which:							
Foodstuffs[2]	$571	$1,736	$2,145	$1,488	$2,024	$3,383	$3,900
United States	$287	$1,127	$1,360	$878	$1,463	$2,359	$1,003
U.S. share (percent)	50.4	64.9	63.4	59.0	72.3	69.7	25.7
European Community	$203	$206	$257	$282	$214	$567	$1,508
European Community share (percent)	35.5	11.8	12.0	18.9	10.6	16.8	38.7
Manufactured[3]	$6,224	$9,808	$10,332	$10,916	$12,154	$13,642	$15,113
United States	$298	$670	$794	$547	$467	$657	$424
U.S. share (percent)	4.7	6.8	7.7	5.0	3.8	4.8	2.8
European Community	$3,690	$5,785	$5,404	$6,270	$6,769	$7,857	$8,585
European Community share (percent)	59.3	59.0	52.3	57.4	55.7	57.6	56.8
High technology	$1,059	$1,615	$1,690	$2,085	$2,345	$2,371	$2,330
United States	$140	$219	$209	$184	$131	$155	$85
U.S. share (percent)	13.2	13.6	12.4	8.8	5.6	6.5	3.6
European Community	$669	$1,012	$996	$1,232	$1,361	$1,452	$1,464
European Community share (percent)	63.2	62.7	58.9	59.1	58.0	61.2	62.8
Exports to IW	$8,081	$8,426	$10,178	$11,622	$12,888	$18,503	$23,658
United States	$350	$255	$221	$235	$273	[4] $899	$453
U.S. share (percent)	4.3	3.0	2.2	2.0	2.1	4.9	1.9
European Community	$4,211	$4,651	$6,136	$6,950	$7,931	$11,281	$15,242
European Community share (percent)	52.1	55.2	60.3	59.8	61.5	61.0	64.4
Trade turnover with IW	$15,113	$20,293	$23,116	$24,536	$27,758	$36,617	$43,494
Balance	+$1,049	−$3,441	−$2,760	−$1,292	−$1,982	+$389	+$3,820
Balance with United States	−$258	−$1,579	−$2,085	−$1,389	−$1,976	−$2,705	−$1,057
Balance with European Community	+$231	−$1,439	+$377	+$270	+$758	+$2,632	+$4,809

---

[1] Belgium-Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, United Kingdom, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, and the United States.

[2] SITC 0, 1, 4.

[3] SITC 5-8.

[4] This data item includes $548 in nonmonetary gold which is not normally reported by the U.N.

Source: U.N. trade data, magnetic tapes.

TABLE A-6.—COMPOSITION OF U.S.S.R. IMPORTS FROM THE INDUSTRIALIZED WEST (IW),[1] 1974–80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1980 percent of total	Average annual rate of growth 1974–80 (percent)
Imports from IW	$7, 032	$11, 867	$12, 938	$12, 914	$14, 870	$18, 114	$19, 837		18. 9
Foodstuffs (SITC 0, 1, 4)	571	1, 736	2, 145	1, 488	2, 024	3, 383	3, 900	19. 7	37. 7
Cereals	367	1, 537	1, 895	1, 141	1, 813	2, 671	2, 433		
Crude materials (SITC 2)	173	221	323	351	496	877	525	2. 6	20. 3
Oil seeds	(²)	3	125	162	217	508	56		
Metalliferous ores and scrap	1	8	25	32	72	138	70		
Pulp and paper	73	113	92	84	77	83	134		
Mineral fuels (SITC 3)	8	29	37	51	88	100	128	. 6	58. 7
Petroleum products	8	29	37	51	87	100	128		
Chemicals (SITC 5)	761	950	901	1, 204	1, 422	1, 927	2, 564	12. 9	22. 4
Chemical elements/compounds	292	389	417	676	781	1, 140	1, 180		
Plastic materials	266	263	228	216	257	309	556		
Basic industrial goods (SITC 6)	2, 844	3, 824	3, 977	3, 759	4, 262	5, 411	6, 120	30. 9	13. 6
Iron and steel	1, 954	2, 522	2, 729	2, 208	2, 740	3, 578	3, 497		
Paper, paperboard	285	500	377	437	424	507	885		
Textile yarn	325	387	362	416	316	480	754		
Metal manufactures	126	214	281	408	387	363	313		
Machinery and transport equipment (SITC 7)	2, 312	4, 570	4, 901	5, 363	5, 930	5, 654	5, 521	27. 8	15. 6
Nonelectric machinery	1, 743	3, 119	3, 475	3, 902	4, 204	3, 859	3, 545		
Electrical machinery	326	552	487	731	880	926	897		
Transport equipment	243	899	939	730	846	869	781		
Miscellaneous manufactures (SITC 8)	308	464	553	591	541	651	908	4. 6	19. 7
Miscellaneous manufactured goods	71	98	224	191	174	207	246		
Instruments, watches, clocks	79	115	119	148	143	207	203		

---

[1] Industrialized West: Belgium-Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, United Kingdom, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, United States.

[2] Negligible.

TABLE A-7.—1979 TOP EXPORTS OF 17 INDUSTRIALIZED WESTERN (IW) COUNTRIES TO U.S.S.R.

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
71	Machinery, nonelectric	1	$3,859,161	21.3		$4,204,108	28.3		$3,901,913	30.2	
67	Iron and steel	2	3,577,859	19.8		2,739,917	18.4		2,208,187	17.1	
04	Cereals	3	2,670,550	14.7		1,813,092	12.2		1,140,526	8.8	
51	Chemical elements and compounds	4	1,139,676	6.3		780,916	5.3		676,486	5.2	
72	Electrical machinery	5	925,999	5.1	67.2	879,993	5.9	70.1	730,965	5.7	67.0
73	Transport equipment	6	868,542	4.8		845,733	5.7		729,654	5.7	
22	Oil-seeds, nuts, kernels	7	507,540	2.8		216,553	1.5		162,429	1.3	
64	Paper, paperboard	8	507,352	2.8		424,320	2.9		436,690	3.4	
65	Textile yarn, fabric, etc	9	479,682	2.6		316,111	2.1		415,753	3.2	
69	Metal manufactures, n.e.s	10	363,090	2.0	82.3	386,877	2.6	84.0	407,719	3.2	83.7
	1979 TOP 50 EXPORTS OF 17 IW COUNTRIES TO U.S.S.R.										
0440	Corn	1	$1,404,523	7.8		$1,074,332	7.8		$406,740	3.1	
0410	Wheat	2	1,072,612	5.9		603,001	4.1		691,565	5.4	
6782	Iron/steel tubes and pipes	3	750,501	4.1		551,386	3.7		312,641	2.4	
67431	Iron/steel plates, sheets	4	673,510	3.7		512,824	3.4		457,994	3.5	
7151	Machine tools for metal	5	635,644	3.5	25.0	637,313	4.3	22.8	650,304	5.0	19.5
6783	Iron/steel tubes, pipes—welded	6	533,432	3.2		475,481	3.2		585,829	4.5	
7198	Nonelectrical machinery, n.e.s	7	516,511	2.9		570,110	3.8		520,927	4.0	
7353	Ships and boats	8	483,892	2.7		487,761	3.3		382,961	3.0	
6784	High pressure steel conduits	9	483,733	2.7		392,451	2.6		340,551	2.6	
2214	Soybeans	10	439,280	2.7	39.3	199,771	1.3	37.1	154,307	1.2	34.9
71919	Heating and cooling equipment, n.e.s	11	335,364	2.1		516,813	3.5		577,519	4.5	
71992	Taps, cocks, valves, etc	12	317,978	1.8		326,422	2.2		290,531	2.2	
71931	Lifting and loading machinery	13	235,993	1.3		219,235	1.5		247,378	1.9	
67411	Iron/steel heavy plates, sheets	14	193,386	1.1		16,321	.1		10,774	.1	
5151	Radioactive chemical elements	15	191,330	1.1	46.6	228,167	1.5	45.8	211,950	1.8	45.2
72952	Electrical measuring/controlling instrument, n.e.s	16	182,643	1.0		146,657	1.0		122,929	1.0	
0230	Butter	17	178,290	1.0		24,232	.2		43,527	.3	
5812	Polyethylene, polystyrene, polyvinyl, etc	18	175,328	1.0		134,351	.9		128,260	1.0	
67323	Bars, rods of alloy steel	19	171,818	.9		139,848	.9		39,004	.3	
71922	Pumps for gases, etc	20	167,071	.9	51.4	242,074	1.6	50.5	187,524	1.5	49.3
7222	Electrical switchgear, etc	21	161,287	.9		182,179	1.2		123,859	1.0	
5150	No descriptor available (chemicals group)	22	145,598	.8		85,701	.6		156,073	1.2	
6911	Iron/steel structural parts	23	137,065	.8		159,376	1.1		200,525	1.6	
71921	Pumps for liquids	24	133,845	.7		120,985	.8		95,040	.7	
71842	Excavating, levelling, boring machinery	25	131,769	.7	55.3	119,340	.8	55.0	93,633	.7	54.5
	Top 50 total		12,376,004			9,857,413			8,500,831		
	Total imports from 17 IW		18,114,258			14,869,804			12,914,126		
	Top 50 as percent of total imports from 17 IW		68.3			66.3			65.8		

TABLE A-8.—ORIGINS OF LEADING U.S.S.R. IMPORTS FROM INDUSTRIALIZED WEST (IW)[1]

[Millions of U.S. dollars]

1979 item rank	SITC	Description: Origin	1979 Origin rank	1979 Value	1979 Item/origin percent of total	1977 Origin rank	1977 Value	1977 Item/origin percent of total
1	71	Machinery, nonelectric		$3, 859	21. 3	--------	$3, 902	30. 2
		Federal Republic of Germany	1	1, 160	30. 1	1	1, 208	31. 0
		France	2	643	16. 7	4	422	10. 8
		Japan	3	498	12. 9	2	561	14. 4
		United States	5	300	7. 8	6	291	7. 5
		European Community		2, 482	64. 3	--------	2, 121	59. 5
2	67	Iron and steel		3, 578	19. 8	--------	2, 208	17. 1
		Federal Republic of Germany	1	1, 298	36. 3	1	747	33. 8
		Japan	2	1, 028	28. 7	2	550	24. 9
		Italy	3	332	9. 3	3	340	15. 4
		United States	12	7	. 2	8	18	. 8
		European Community		2, 284	63. 8	--------	1, 536	69. 6
3	04	Cereals		2, 671	14. 7	--------	1, 141	8. 8
		United States	1	2, 254	84. 4	1	849	74. 4
		Canada	2	356	13. 3	2	270	23. 7
		France	3	38	1. 4	3	13	1. 2
		European Community		55	2. 1	--------	21	1. 8
4	51	Chemical elements and compounds		1, 140	6. 3	--------	676	5. 2
		France	1	226	19. 8	1	228	33. 7
		Federal Republic of Germany	2	199	17. 4	3	92	13. 6
		United Kingdom	3	181	15. 9	2	179	26. 4
		United States	5	112	9. 8	6	16	2. 4
		European Community		730	64. 0	--------	544	80. 5
5	72	Electrical machinery		926	5. 1	--------	731	5. 7
		Federal Republic of Germany	1	202	21. 8	1	175	24. 0
		France	2	178	19. 2	2	109	14. 9
		Japan	3	154	16. 7	3	82	11. 2
		United States	6	45	4. 9	6	64	8. 7
		European Community		537	57. 4	--------	417	57. 0

---

[1] IW countries: Belgium-Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, United Kingdom, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, United States.

TABLE A-9.—INDUSTRIALIZED WEST. (I.W.) EXPORT TRADE SHARES TO U.S.S.R. 1974–80

[Dollar amounts in thousands of dollars]

	1974		1975		1976		1977		1978		1979		1980		1974–80	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW. total	$7, 031, 885	100. 0	$11, 866, 951	100. 0	$12, 937, 976	100. 0	$12, 914, 126	100. 0	$14, 869, 804	100. 0	$18, 114, 258	100. 0	$19, 837, 481	100. 0	$97, 572, 481	100. 0
Belgium-Luxembourg	368, 481	5. 2	349, 683	2. 9	296. 689	2. 3	273. 590	2. 1	350, 352	2. 4	467, 536	2. 6	618, 745	3. 1	2, 725, 076	2. 8
Denmark	35, 332	. 5	61, 475	. 5	68, 230	. 5	72, 411	. 6	60, 991	. 4	94, 512	. 5	88, 448	. 4	481, 399	. 5
Federal Republic of Germany	1, 856, 084	26. 4	2, 824, 386	23. 8	2, 684, 725	20. 8	2, 788, 769	21. 1	3, 140, 650	21. 1	3, 618, 619	20. 0	4, 373, 332	22. 0	21, 286, 565	21. 8
France	656, 091	9. 3	1, 146, 940	9. 7	1, 118, 096	8. 6	1, 496, 285	11. 6	1, 455, 451	9. 8	2, 007, 499	11. 1	2, 463, 812	12. 4	10, 344, 174	10. 6
Ireland	19, 316	. 3	22, 163	. 2	3, 306	0	11, 091	. 1	10, 625	. 1	45, 854	. 3	49, 410	. 2	161, 765	. 2
Italy	617, 666	8. 8	1, 019, 666	8. 6	981, 423	7. 6	1, 227, 668	9. 5	1, 133, 024	7. 6	1, 219, 860	6. 7	1, 271, 071	6. 4	7, 470, 378	7. 7
The Netherlands	169, 833	2. 4	207, 000	1. 7	175, 142	1. 4	203, 851	1. 6	210, 421	1. 4	304, 282	1. 7	508, 999	2. 6	1, 779, 528	1. 8
United Kingdom	256, 941	3. 7	458, 934	3. 9	431, 531	3. 3	606, 758	4. 7	811, 791	5. 5	891, 127	4. 9	1, 058, 945	5. 3	4, 516, 027	4. 6
Economic Community, subtotal	3, 979, 744	56. 6	6, 090, 247	51. 3	5, 759, 142	44. 5	6, 680, 423	51. 7	7, 173, 305	48. 2	8, 649, 289	47. 7	10, 432, 762	52. 6	48, 764, 912	50. 0
Austria	188, 592	2. 7	216, 102	1. 8	237, 374	1. 8	279, 342	2. 2	371, 681	2. 5	512, 117	2. 8	477, 746	2. 4	2, 282, 954	2. 3
Canada	30, 181	. 4	402, 359	3. 4	542, 940	4. 2	338, 403	2. 6	478, 442	3. 2	653, 900	3. 6	1, 314, 830	6. 6	3, 761, 055	3. 9
Finland	762, 566	10. 8	1, 129, 999	9. 5	1, 281, 628	9. 9	1, 490, 811	11. 5	1, 527, 808	10. 3	1, 540, 927	8. 5	2, 493, 584	12. 6	10, 227, 122	10. 5
Japan	1, 101, 697	15. 7	1, 624, 429	13. 7	2, 251, 894	17. 4	1, 933, 877	15. 0	2, 502, 195	16. 8	2, 461, 464	13. 6	2, 778, 231	14. 0	14, 653, 787	15. 0
Norway	39, 800	. 6	94, 773	. 8	76. 681	. 6	75, 997	. 6	88, 792	. 6	87, 517	. 5	112, 178	. 6	575, 278	. 6
Sweden	179, 223	2. 5	292, 515	2. 5	280, 315	2. 2	256, 955	2. 0	209, 941	1. 4	339, 280	1. 9	420, 236	2. 1	1, 978, 495	2. 0
Switzerland	142, 226	2. 0	182, 356	1. 5	202, 057	1. 6	234, 744	1. 8	268, 218	1. 8	265, 656	1. 5	298, 167	1. 5	1, 593, 414	1. 6
United States	607, 856	8. 6	1, 834, 141	15. 5	2, 305, 955	17. 8	1, 623, 574	12. 6	2, 249, 423	15. 1	3, 604, 118	19. 9	1, 509, 747	7. 6	13, 734, 816	14. 1

TABLE A-10.—COMPOSITION OF U.S.S.R. EXPORTS TO THE INDUSTRIALIZED WEST (IW), [1] 1974–80

[Dollar amounts in millions of U.S. dollars]

	1974	1975	1976	1977	1978	1979	1980	1980 percent of total	Average annual rate of growth 1974–80 (percent)
Exports to IW	$8,081	$8,426	$10,178	$11,622	$12,888	$18,503	23,658		19.6
Foodstuffs (SITC 0, 1, 4)	297	270	216	221	226	251	240	1.0	−3.5
Fish	62	65	67	75	89	112	105		
Meat	19	21	29	44	40	40	39		
Beverages	8	11	14	16	23	34	34		
Live animals	12	15	17	13	13	14	12		
Crude materials (SITC 2)	2,070	1,938	2,119	2,304	2,107	2,456	2,623	11.1	4.0
Wood, lumber, cork	1,126	921	1,064	1,216	1,137	1,455	1,579		
Textile fibers (cotton)	363	367	444	532	432	430	413		
Mineral fuels (SITC 3)	3,507	4,325	5,714	6,536	7,501	11,387	16,065	67.9	28.9
Petroleum and petroleum products	3,018	3,520	4,783	5,177	5,692	9,029	11,961		
Natural gas	87	189	292	396	617	737	1,670		
Coal	356	532	512	483	446	474	549		
Chemicals (SITC 5)	301	304	366	708	861	1,384	1,302	5.5	27.6
Chemical elements and compounds	200	176	274	583	748	1,246	1,073		
Fertilizers, manufactured	65	86	54	57	63	67	139		
Basic industrial goods (SITC 6)	1,640	1,166	1,229	1,377	1,604	2,136	2,535	10.7	7.5
Nonmetallic mineral manufacturers (diamonds)	523	473	534	636	785	1,051	1,318		
Nonferrous metals	864	432	438	456	529	746	823		
Machinery and transport equipment (SITC 7)	183	323	393	326	415	630	558	2.4	20.4
Transport equipment	78	155	213	183	249	469	353		
Machinery, nonelectric	78	131	145	103	123	115	157		
Miscellaneous manufactured goods (SITC 8)	49	55	67	72	104	131	129	.5	17.5
Instruments, watches, clocks	22	25	23	25	29	32	37		
Miscellaneous manufactures	25	28	40	41	65	87	77		

---

[1] Industrialized West includes the following countries: Belgium, Luxembourg, Denmark, Federal Republic of Germany, Ireland, Italy, Netherlands, United Kingdom, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, United States.

TABLE A-11.—1979 TOP IMPORTS OF 17 INDUSTRIALIZED WESTERN COUNTRIES FROM U.S.S.R.

[Dollar amounts in thousands of U.S. dollars]

SITC	Descriptor	1979 rank	1979 value	Percent of total	Cumulative percent	1978 value	Percent of total	Cumulative percent	1977 value	Percent of total	Cumulative percent
	2-DIGIT SITC AGGREGATES										
33	Petroleum and petroleum products	1	$9,028,750	48.8		$5,692,373	44.2		$5,177,482	44.5	
24	Wood	2	1,454,817	7.9		1,373,368	8.8		1,216,329	10.5	
51	Chemical elements, compounds	3	1,245,548	6.7		747,968	5.8		582,568	5.0	
66	Nonmetallic mineral manufactures	4	1,050,699	5.7		785,297	6.1		636,036	5.5	
68	Nonferrous metals	5	745,676	4.0	73.1	528,881	4.1	69.0	455,906	3.9	69.4
34	Natural gas	6	737,001	4.0		617,091	4.8		396,442	3.4	
32	Coal	7	474,081	2.6		445,645	3.5		483,470	4.2	
73	Transport equipment	8	468,559	2.5		249,463	1.9		182,936	1.6	
26	Textile fibers	9	430,234	2.3		432,212	3.4		532,256	4.6	
28	Metalliferous ores and scrap	10	221,166	1.2	85.7	220,987	1.7	84.2	235,780	2.0	85.2
	1979 TOP 50 EXPORTS OF 17 IW COUNTRIES TO U.S.S.R.										
33101	Crude petroleum	1	$3,663,202	19.8		$2,609,034	20.2		$2,579,589	22.2	
3323	Distillate fuels	2	3,210,095	17.3		1,780,321	13.8		1,361,646	11.7	
3324	Residual fuel oils	3	1,114,520	6.0		623,785	4.8		638,086	5.5	
5151	Radioactive chemical elements	4	922,498	5.0		569,003	4.4		461,231	4.0	
3321	Gasoline	5	821,179	4.4	52.6	536,093	4.2	47.5	327,775	2.8	48.2
3411	Natural gas	6	734,616	4.0		617,091	4.8		396,442	3.4	
24221	Sawlogs, conifer	7	693,293	3.7		529,190	4.1		532,262	4.8	
24321	Sawlogs, nonconifer	8	576,143	3.1		461,996	3.6		500,544	4.3	
68121	Platinum	9	391,815	2.1		220,273	1.7		181,169	1.8	
2631	Raw cotton	10	387,348	2.1	67.6	403,941	3.1	64.8	504,999	4.3	84.4
3214	Coal	11	386,825	2.1		361,515	2.8		408,815	3.5	
6672	Diamonds	12	320,365	1.7		379,224	2.9		621,865	5.4	
7321	Passenger cars	13	268,598	1.5		176,827	1.4		136,062	1.2	
2421	Pulpwood	14	167,396	.9		127,609	1.0		150,975	1.3	
6841	Alminum, aluminum alloys	15	158,643	.9	74.7	170,601	1.3	74.2	143,198	1.2	77.0
51361	Ammonia	16	129,106	.7		53,290	.4		7,365	.1	
6831	Nickel, nickel alloys	17	119,302	.6		76,200	.6		45,118	.4	
2120	Fur skins	18	117,264	.6		89,829	.7		74,792	.8	
2820	Iron and scrap	19	110,755	.6		58,774	.5		67,573	.6	
7353	Ships and boats	20	82,204	.4	77.7	25,798	.2	76.8	16,761	.1	78.8
3218	Coke	21	72,910	.4		73,775	.6		66,872	.6	
73592	Special purpose vessels	22	70,963	.4		8,145	.1		0	.0	
5613	Potassic fertilizers	23	61,771	.3		57,941	.4		56,155	.5	
3322	Kerosene, jet fuel	24	59,778	.3		75,057	.6		65,080	.6	
25172	Bleached sulphate wood pulp	25	50,891	.3	79.4	44,022	.3	78.6	28,680	.2	80.6
	Top 50 total		15,524,856			10,783,424			10,079,233		
	Total exports to 17 IW		18,503,481			12,888,419			11,822,382		
	Top 50 as percent total exports to 17 IW		83.9			83.7			86.7		

TABLE A-12.—INDUSTRIALIZED WEST (IW) IMPORT TRADE SHARES FROM U.S.S.R., 1974–80

[Dollar amounts in thousands of U.S. dollars]

	1974		1975		1976		1977		1978		1979		1980		Total, 1974–80	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
IW, total	$8,080,987	100.0	$8,425,789	100.0	$10,178,321	100.0	$11,622,382	100.0	$12,888,419	100.0	$18,503,481	100.0	$23,657,553	100.0	$93,356,932	100.0
Belgium-Luxembourg	271,081	3.4	299,546	3.6	300,638	3.0	403,294	3.5	468,750	3.6	592,965	3.2	1,103,965	4.7	3,440,239	3.7
Denmark	124,383	1.5	172,408	2.0	232.752	2.3	254,010	2.2	302,342	2.3	420,010	2.3	399,209	1.7	1,905,144	2.0
Federal Republic of Germany	1,222,662	15.1	1,294,953	15.4	1,701,544	16.7	1,852,874	15.9	2,489,275	19.3	3,883,075	21.0	4,036,184	17.1	16,480,567	17.7
France	590,575	7.3	771,170	9.2	913,695	9.0	1,156,111	9.9	1,225,238	9.5	1,790,400	9.7	3,566,908	15,1	6,803,879	7.3
Ireland	35,012	.4	40,002	.5	39,588	.4	44,698	.4	47,793	.4	86,647	.5	48,395	.2	342,135	.4
Italy	802,863	9.9	879,133	10.4	1,364,075	13,4	1,444,905	12,4	1,534,788	11.9	1,902,031	10.3	2,987,143	12.6	10,914,938	11.7
The Netherlands	235,971	2.9	303,857	3.6	387,449	3.8	432,119	3.7	535,119	4.2	845,902	4.6	1,275,334	5.4	4,015,751	4.3
United Kingdom	928,560	11.5	889,320	10.6	1,196,212	11.8	1,362,014	11.7	1,327,998	10.3	1,759,965	9.5	1,825,118	7.7	9,289,187	10.0
European Community, subtotal	4,211,107	52.1	4,650,389	55.2	6,135,953	60.3	6,950,025	59.8	7,931,303	61.5	11,281,025	60.7	15,242,256	64.4	56,402,058	60.4
Austria	237,189	2.9	318,700	3.4	421,207	4.1	510,975	4.4	607,964	4.7	759,794	4.1	1,023,556	4.3	3,879,386	4.2
Canada	20,916	.3	25,060	.3	47,921	.5	44,178	.4	25,945	.2	49,401	.3	42,487	1.8	255,908	.3
Finland	1,251,703	15.5	1,272,829	15.1	1,365,580	13,4	1,498,394	12.9	1,474,987	11.4	2,206,552	11.9	3,285,054	13.9	12,355,099	13.2
Japan	1,418,893	17.6	1,168,123	13.9	1,166,211	11.5	1,416,285	12.2	1,408,933	10.9	1,869,116	10.1	1,812,375	7.7	7,672,920	8.2
Norway	69,355	.9	86,183	1.0	86,039	.8	117,794	1.0	101,525	.8	146,450	.8	92,486	3.9	699,832	.7
Sweden	400,575	5.0	528,883	6.3	476,256	4.7	489,538	4.2	549,128	4.3	1,059,931	5.7	746,976	3.2	4,251,287	4.6
Switzerland	121,026	1.5	121,094	1.4	258,253	2.5	360,559	3.1	515,930	4.0	780,119	4.2	959,363	4.1	3,116,344	3.3
United States	350,223	4.3	254,528	3.0	220,901	2.2	234,633	2.0	272,704	2.1	351,093	1.9	453,000	1.9	2,137,082	2.3

TABLE A-13.—PROJECTED 1985 U.S.S.R. TRADE WITH THE INDUSTRIALIZED WEST (IW)[1]

[Dollar amounts in millions of U.S. dollars]

	1980		Projected 1985		Projected average annual growth rate 1980–85
	Amount	Percent	Amount	Percent	
Imports from IW	$19,837		$34,200		11.5
Foodstuffs (SITC 0, 1, 4)	3,900	19.7	4,500	13.2	2.9
Crude materials (SITC 2)	525	2.6	1,600	4.7	25.0
Mineral fuels (SITC 3)	128	0.6	700	2.0	40.5
Chemicals (SITC 5)	2,564	12.9	4,000	11.7	9.3
Basic industrial goods (SITC 6)	6,120	30.9	11,000	32.2	12.4
Machinery and transport equipment (SITC 7)	5,521	27.8	9,600	28.1	11.7
Miscellaneous manufactured goods (SITC 8)	908	4.6	2,500	1.3	22.5
Other (SITC 9)	171	.9	300	.9	11.9
Exports to IW	$23,658		$26,900		2.6
Foodstuffs (SITC 0, 1, 4)	240	1.0	300	1.1	4.6
Crude materials (SITC 2)	2,623	11.1	3,600	13.4	6.5
Mineral fuels (SITC 3)	16,065	67.9	13,700	51.0	−3.1
Chemicals (SITC 5)	1,302	5.5	3,200	11.9	19.7
Basic industrial goods (SITC 6)	2,535	10.7	4,200	15.6	10.6
Machinery and transport equipment (SITC 7)	558	2.4	1,300	4.8	18.4
Miscellaneous manufactured goods (SITC 8)	129	.5	300	1.1	18.4
Other (SITC 9)	206	1.9	300	1.1	7.8
Trade turnover	43,495		61,100		7.0
Balance	+3,821		−7,300		

---

[1] Belgium-Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, United Kingdom Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, and United States.

TABLE A-14.—PROJECTED 1985 U.S.-U.S.S.R. TRADE

[Millions of U.S. dollars]

	1979	1980	1981	Projected 1985	
				Low-range estimate[1]	High-range estimate[2]
U.S. exports	3,604	1,510	2,339	4,200	5,800
Foodstuffs (SITC 0, 1, 4)	2,358	1,003	1,657	2,300	3,450
Crude materials (SITC 2)	564	56	59	700	800
Mineral fuels (SITC 3)	23	27	63	100	125
Chemicals (SITC 5)	136	31	180	400	500
Basic industrial goods (SITC 6)	50	25	32	150	175
Machinery and transport equipment (SITC 7)	384	269	301	400	550
Miscellaneous manufactured goods (SITC 8)	86	99	46	150	150
Commodities n.e.c. (SITC 9)	1	1	1		
U.S. imports	899	453	347	1,000	1,700
Foodstuffs (SITC 0, 1, 4)	12	10	8	20	35
Crude materials (SITC 2)	37	15	18	60	90
Mineral fuels (SITC 3)	17	17	112	15	20
Chemicals (SITC 5)	81	149	94	450	600
Basic industrial goods (SITC 6)	166	139	88	150	270
Machinery and transport equipment (SITC 7)	5	3	2	15	25
Miscellaneous manufactured goods (SITC 8)	33	30	3	40	60
Commodities n.e.c. (SITC 9)	[3] 548	[3] 90	[3] 23	[3] 250	[3] 600
Trade turnover	4,503	1,963	2,686	5,200	7,500
Balance for United States	+2,705	+1,057	+1,992	+3,200	+3,900

---

[1] Based on trends observed prior to 1980, the first year of U.S. sanctions against the U.S.S.R.

[2] Based on trends observed prior to 1980, with addition of MFN and vastly improved U.S. economic conditions.

[3] Nonmonetary gold.

Source: 1979 data from United Nations. 1980 and 1981 data from U.S. Census Bureau.

VIETNAM: PERFORMANCE AND PROSPECTS FOR TRADE WITH THE UNITED STATES AND THE WEST

By Damian T. Gullo

CONTENTS

Page
Introduction 318
I. Past Trade Objectives and Performance 319
II. Hard Currency Debt 320
III. Hard Currency Trade Objectives and Strategy, 1981–85 322
IV. Hard Currency Export Capabilities, 1981–85 324
V. Hard Currency Trade and Debt Outlook, 1981–85 326
VI. U.S.-Vietnam Trade Potential Under Normalized Conditions 327
VII. Projected 1985 U.S.-Vietnam Trade Under Alternative Scenarios 329

TABLES

1. Vietnam's Foreign Trade 1976–79 321
2. Western Commercial Banks' Gross Claims on Vietnam 321
3. SRV Imports from 29 Hard Currency Trading Partners 322
4. SRV Exports to 29 Hard Currency Trading Partners 325
5. Projected 1985 Vietnam's Trade with 29 Hard Currency Trading Partners 327
6. U.S. Exports to Vietnam 328
7. U.S. Imports from Vietnam 330
8. Projected 1985 U.S. Trade with Vietnam 330

INTRODUCTION

Since the end of the war in 1975, the unified Vietnamese economy has registered little in the way of economic gains. Economic growth has not kept pace with annual population increases. Consequently, the country's standard of living now is worse than during the waning days of the war and probably no better than conditions of almost two decades ago. During 1976–80, Vietnam's national output grew in real terms by less than 2 percent annually. This was well below the planned target and in sharp contrast to its ASEAN (Association of Southeast Asian Nations) neighbors who experienced annual real output gains of about 7 percent for the same period.

The blame for the poor economic performance rests with Hanoi's inability to manage a centrally planned economy and, to a lesser extent, on adverse weather conditions and Vietnam's military ventures in Southeast Asia. The government so far has failed to offer sufficient production incentives—particularly to the agricultural sector. Hanoi's domestic policies also have resulted in lost output from the flight of more than 400,000 Vietnamese and over 500,000 Chinese. Refugees from the south included entrepreneurs, skilled workers, and government administrators. In the north, meanwhile, the forced departure of Chinese seriously affected the output of the coal, fishing, and transportation industries; Chinese constituted a large share of the labor force in these sectors.

In addition to poor policies, agricultural performance was hurt by drought conditions in 1977, floods in 1978, and a series of typhoons and tropical storms that hit in 1980. As a result, Hanoi has been forced to purchase foreign grain with funds originally earmarked for needed capital good imports.

Revitalization efforts also have been hampered by Vietnam's invasion of Kampuchea in December 1978 and its border conflict with China. Resources have been shifted away from rebuilding the economy to wartime mobilization. In addition to channeling a larger share of GNP to defense, Hanoi has turned the transport sector toward defense efforts and away from civilian use and has diverted the military from its peacetime task of infrastructure development.

In early 1981, Hanoi took several steps that emphasized incentives and market forces in an effort to halt the economic down slide. Measures included granting limited autonomy to industrial units; instituting industrial wage incentives; reducing restrictions on private farming; stimulating exports; and redirecting investment funds to overcome bottlenecks in the energy and transport sectors. Results to date have been less than satisfactory, however. In addition to rising inflation, Vietnam is still plagued with severe food shortages, energy shortfalls, inadequate transport facilities, and a deteriorating foreign exchange position. Indeed, hard currency shortages reportedly have forced Vietnam to miss payments on its foreign debt and to seek rescheduling from some of its creditors.

Because of its military activities in Kampuchea and failing economy, Vietnam has become more dependent on the U.S.S.R. and its allies. Western countries and international financial institutions began cutting back their economic and commercial aid in 1979 with the invasion of Kampuchea. In addition, China in 1978 stopped its aid to Vietnam; the PRC was Vietnam's second largest aid donor. Economic assistance from the Bloc countries, on the other hand, has grown steadily and now totals an estimated $1.5–$2.0 billion annually. Hanoi also looks to the Soviet Union to satisfy a large share of Vietnam's food grain and petroleum requirements. Imports from the U.S.S.R. now account for about nearly one-half of Vietnam's total imports compared with only 31 percent in 1976 and the share is likely to increase. Hanoi recently signed two five-year agreements (1981–85) with Moscow that cover aid and commodity exchanges. Vietnam reportedly will receive Soviet assistance for the completion of 60 projects currently under way and for 40 new projects. The trade agreement, meanwhile, calls for a substantial increase in Soviet deliveries of essential goods, including petroleum products, vehicles, metals, and fertilizers.

I. PAST TRADE OBJECTIVE AND PERFORMANCE

Under the 1976–80 economic plan, the foreign trade sector was given a key role in Vietnam's reconstruction and development efforts. The plan called for a sharp increase in traditional exports—coal, fish, forestry products, and rubber—to help pay for needed imports of capital goods and raw materials, and the broadening of trade relations with both communist and noncommunist countries. However, exports fell far short of the target because of poor management by Hanoi, adverse weather, and transportation bottlenecks. Renewed hostilities and the departure of skilled workers in several key sectors and support facilities also added to the export sector's woes. After sharply increasing in 1977 to $479 million, exports declined by $15 million in 1978, managed only a weak rebound in 1979 to $484 million, and most likely fell again in 1980. Hanoi also failed in its attempts to broaden commercial ties with the West. In 1979, roughly 78 percent of Vietnam's exports went to CMEA markets compared with only 48 percent in 1976. (Vietnam joined CMEA in 1978). This share increased in 1980 because of a rise in exports to the U.S.S.R. and a small decline in shipments to the West.

In contrast with the fluctuations in exports, Vietnamese total imports steadily increased in 1976–79 and reached an estimated $1.5 billion in 1979. Imports from the West, however, have declined since peaking in 1978 because of hard currency shortages stemming from Vietnam's poor export performance and lower than expected foreign capital inflows. Hard currency imports in 1980 totalled an estimated $518 million compared with $675 million in 1978 and $616 million in 1979.[1] Purchases of Western capital goods and semimanufactures were especially hit hard. In 1980, Vietnamese imports of semimanufactures from the West amounted to $120 million—one-half the 1979 level—while deliveries of Western machinery and equipment totalled $188 million—12 percent less than in 1979. Imports of capital goods from the U.S.S.R. in 1980, on the other hand, were more than three-fourths greater than in 1979 and totalled $331 million. A share of these imports presumably went to support Hanoi's military effort in Southeast Asia.

During the 1976–78 period, Vietnam looked in vain to the United States for substantial material and financial assistance. In addition to foreign aid, Hanoi sought technical help for its ailing agricultural sector and spare parts for machinery—particularly transport equipment—that the United States had left behind. Vietnam also wanted U.S. oil companies to resume their offshore exploration, which was suspended prior to the end of the war. The United States, however, has not established relations with Vietnam because of Hanoi's earlier insistence of an aid commitment by the United States as a precondition for normalization of relations and, more recently, the invasion of Kampuchea.

II. HARD CURRENCY DEBT

Because of the widening gap since 1976 between hard currency exports and imports, Vietnam's outstanding hard currency debt rose sharply and reached an estimated $1.4 billion by the end of September 1980. (Vietnam's debt to Western commercial banks is shown in table 2.) Stagnant exports coupled with the need for Western capital goods and food led to an accumulative trade deficit with the West for 1976–80 of roughly $2 billion. Meanwhile, Vietnam's debt service payments during this period rose sharply and in 1980 totalled an estimated $240 million. In 1976, principal and interest payments amounted to only $4 million.

---

[1] These figures represent Vietnam's imports from 29 hard currency trading partners, which probably account for nearly all of Vietnam's purchases from the West.

TABLE 1.—VIETNAM'S FOREIGN TRADE, 1976–79

[Millions of U.S. dollars]

	1976	1977	1978	1979
Total exports	224	479	464	483
West (c.i.f.)[1]	117	133	108	118
Of which:				
Japan	49	72	51	48
Singapore	25	19	14	18
Hong Kong	24	24	21	17
European Community	12	9	12	14
Communist	107	346	356	[2] 365
Of which:				
U.S.S.R.	84	176	224	225
Total imports	984	1,030	1,375	1,516
West (f.o.b.)[3]	334	455	675	616
Of which:				
European Community	71	155	294	272
Japan	167	175	217	118
Sweden	29	34	60	56
Singapore	16	26	40	50
Communist	650	575	700	900
Of which:				
U.S.S.R.	308	372	449	681
Total turnover	1,208	1,509	1,839	1,999
West	451	588	783	734
Communist	757	921	1,056	1,265
Trade balance	−760	−551	−911	−1,033
West	−217	−322	−576	−498
Communist	−543	−229	−344	−535

[1] Data reflect Vietnam's exports to 29 hard currency trading partners, which account for the bulk of Vietnam's deliveries to the West. Exports figures probably are on the high side because they were obtained for partner country statistics; Western countries usually include transport and insurance in their valuation of imports.

[2] Estimate.

[3] Data reflect Vietnam's imports from 29 hard currency trading partners, which account for the bulk of Vietnam's purchase from the West. Oil imports from the Middle East are not included. In 1979, these imports totaled an estimate $20,000,000 to $30,000,000.

TABLE 2.—WESTERN COMMERCIAL BANKS' GROSS CLAIMS ON VIETNAM

[In millions of U.S. dollars]

Yearend	Total	Maturity structure		
		1 yr or less	More than 1 yr	Unallocated
December 1977	160	81	77	2
December 1978	451	41	257	153
December 1979	575	62	336	177
June 1980	595	111	342	142
December 1980	510	106	281	123

Source: Bank for International Settlement (BIS).

Since 1976, Hanoi has relied heavily on official credits to meet its financial needs. Long-term concessional loans from foreign governments accounted for over three-fourths of Vietnam's debt with the remainder consisting largely of suppliers' credits and medium-term commercial bank loans. More than one-third of Vietnam's outstanding obligations to foreign governments were to oil producing countries—Algeria, Iraq, and Libya—who had extended credits to help Hanoi pay for imported oil. Vietnam at the end of September 1980 also owed France more than $200 million and Japan roughly $120 million.

III. HARD CURRENCY TRADE OBJECTIVES AND STRATEGY, 1981–85

Although the 1981–85 economic plan has not been announced, improving the country's infrastructure, boosting agricultural production—particularly rice output—and expanding exports should be high on Hanoi's priority list.[2] The new plan also is expected to include many of the targets originally contained in the 1976–80 plan but which were not reached such as food self-sufficiency. However, revitalization efforts should continue to be hampered by mismanagement, hard currency shortages, Vietnam's military involvement in Kampuchea, and the need to defend its northern border from a Chinese attack.

Vietnam is expected to look to the West for imports of foodstuffs and capital goods as it did in 1976–80 (see table 3). Unless there is a marked improvement in Hanoi's relations with the West, however, imports in 1981–85 are likely to continue declining because of hard currency shortages stemming from the reduction in Western financial

TABLE 3.—SRV IMPORTS FROM 29 HARD CURRENCY TRADING PARTNERS

[Dollar amounts in millions of U.S. dollars]

	1976	1977	1978	1979	1980	Average annual rate of growth, 1977–80 (percent)
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	$53.6	$107.7	$139.5	$197.4	$156.4	31
Dairy products and eggs	6.8	51.2	46.6	53.5	4.3	
Cereal grains	41.2	49.6	88.9	133.7	140.5	
Other	5.6	6.9	4.0	10.2	11.6	
Fuels and crude materials (SITC 2,3)	25.9	45.7	72.3	51.6	34.0	7
Paper and pulp	8.4	5.8	4.5	.1	8.0	
Textilefibers	4.3	2.7	3.9	.9	3.2	
Fertilizers and materials, crude	.5	.2	.3	.7	1.2	
Coal and coke	3.4	1.8	2.6	3.5	2.4	
Petroleum products	5.6	34.2	60.2	45.5	17.6	
Other	3.7	1.1	.8	.9	1.6	
Chemicals (SITC 5)	71.6	46.0	58.9	25.4	44.8	−11
Chemical elements	19.2	16.8	16.7	13.0	19.3	
Fertilizer, manufactured	17.7	7.0	15.8	(1)	8.2	
Plastic materials	14.6	9.3	7.6	2.1	4.8	
Chemical materials n.e.s.	7.7	4.5	12.4	4.1	6.7	
Other	12.4	8.4	6.4	6.2	5.8	
Basic manufacturers (STIC 6)	101.2	163.8	182.7	95.8	75.3	−7
Textiles, yarns and fabric	36.9	61.8	56.6	28.5	26.0	
Nonmetal minerals	1.8	8.2	5.8	10.0	4.5	
Iron and steel	35.3	58.1	83.0	27.4	10.0	
Nonferrous metals	6.0	8.0	3.8	1.3	1.0	
Manufactures of metal n.e.s	9.6	16.7	23.0	22.8	17.1	
Other	11.6	11.0	10.5	5.8	16.7	
Machinery and transport equipment (SITC 7)	71.5	122.2	212.8	231.7	188.2	27
Machinery and nonelectrical	38.8	67.0	140.4	158.5	106.3	
Electrical machinery	11.5	19.9	28.6	41.8	33.3	
Transportation equipment	21.2	35.3	43.8	30.9	46.7	
Miscellaneous manufactured goods (SITC 8)	4.0	6.1	7.7	13.6	15.3	40
Furniture	.8	1.1	2.3	2.5	2.3	
Scientific and medical instruments	1.9	3.0	3.3	4.8	5.5	
Miscellaneous manufactured goods n.e.s	1.0	1.2	1.5	5.4	6.7	
Other	.3	.8	.9	.9	.8	
Other (SITC 9)	5.9	3.2	1.1	1.3	4.3	−8
Total	333.7	454.6	675.0	616.2	518.3	12

[1] Negligible.

Source: U.N. trade tapes, 1976–80.

---

[2] Hanoi announced an unambitious one-year plan for 1981 that probably will be incorporated into the 1981–85 plan.

support and Hanoi's inabilty to substantially boost exports. Vietnam's dependence on the USSR, meanwhile, is expected to continue to increase. The following is an assessment of Vietnam's imports for 1981–85.

Foodstuffs.—Because of severe hard currency shortages, Vietnam is expected to hold down foodstuffs purchases—largely cereals and dairy products—from the West in 1981–85. Instead, Hanoi most likely will look to the USSR for increasing amounts of grain to cover shortfalls and more actively seek international aid. Vietnam's agricultural sector, meanwhile, should continue to suffer from shortages of fertilizers, pesticides, energy, and farm equipment. In addition, there is little evidence that incentive measures unveiled in late 1979 have had more than a marginal impact on boosting agricultural output. In response to food riots in Haiphong and Nghe Tinh and other expressions of discontent, additional agricultural reform measures were introduced in early 1981.

During 1976–80, Vietnam imported from the West about $292 million worth of wheat flour, $116 million in unmilled wheat, and $122 million in dairy products. The European Community (EC), Greece, and Singapore were the main suppliers of flour, while Australia provided most of the wheat.[3] (A share of the wheat and flour imports may have been bought on Soviet account for delivery to Vietnam.) Dry milk and butter from the EC accounted for all of Vietnam's purchases of dairy products from the West.

Fuels and Crude Materials.—Annual Vietnamese imports of oil products from the West for 1981–85 probably will remain close to the 1980 level of $17.6 million. (Petroleum imports from the Middle East oil-producing countries—in particular, the countries that have extended Vietnam long-term concessionary loans—are not included in the 1980 total. Although data on actual sales are unavailable, oil purchases from these countries added an estimated $20–$30 million to Vietnam's 1979 oil bill.) Of the $17.6 million in oil products imported in 1980 from the 29 hard currency countries contained in the data base, slightly more than half were purchased from Italy with most of the remainder coming mainly from Japan and Singapore. Increased Soviet oil deliveries called for in the 1981–85 commodities exchange agreement between Vietnam and the U.S.S.R., coupled with hard currency constraints, should hold down Vietnamese petroleum imports from the West over the next four years. The U.S.S.R. currently supplies a large share of Vietnam's petroleum requirements either directly or by purchases on the world market; a large share of these imports are earmarked for military use. During the next four years, Hanoi can expect little help from domestic production since chances are slim that oil from offshore fields will flow before the late 1980's if at all. Western oil companies, which had searched offshore since the early 1970's and had failed to discover commercial quantities of oil, recently abandoned their efforts. As a result, Hanoi now will have to rely solely on the U.S.S.R. for offshore development. The Soviets, who in 1980 were invited to join in the oil hunt, lag behind the West in offshore experience and technology.

Chemicals.—CMEA countries are expected to satisfy a larger share of Vietnam's chemical needs in 1981–85. As a result, Vietnamese purchases of Western chemical products most likely will be limited to the products unattainable from Vietnam's allies. Imports of Western fertilizer, for example, may be up the next several years as Hanoi renews its effort to boost agricultural production and trys to offset a reduction in domestic fertilizer output; the country's main fertilizer mine at Lao Cai was severely damaged in 1980 during the border war with China. Domestic production should get a boost in 1982 when the Soviet-Vietnamese built superphosphate plant at Lam Thao is completed. The Hoc Mou fertilizer plant, which was built with Danish aid, began operation in 1981.

---

[3] Greece became a member of the EC on January 1, 1981.

Japan traditionally has been Vietnam's major Western supplier of chemicals. For 1976–80, Japanese deliveries accounted for nearly two-thirds of the $247 million worth of chemical products Vietnam imported from the West.

Basic Manufactures.—Hard currency imports in 1981–85 of basic manufactures—largely textiles and metal products—are expected to continue their decline but at a slower rate. Because of foreign exchange constraints, Vietnam should turn increasingly toward CMEA countries for these commodities. Textiles, yarn, and fabric imports from the West have declined annually by roughly 30 percent since reaching a record $62 million in 1977. Similarly, purchases of iron and steel from the West plummeted to $10 million in 1980 after hitting a record $83 million in 1978. Soviet deliveries of iron and steel, on the other hand, doubled to $25 million in 1979 and declined to $22 million in 1980. Japan traditionally has been Vietnam's leading Western supplier of textiles and iron and steel.

Machinery and Transport Equipment.—For 1981–85, imports of machinery and transport equipment from the West are expected to decline because of the reduced level of Western financial assistance and a growing dependence on CMEA countries—particularly the U.S.S.R. Imports of machinery and equipment rose at an average annual rate of 75 percent in 1977–78 reflecting Hanoi's access to Western credits. However, the pace slowed substantially in 1979 as Vietnam became increasingly isolated from the West and in 1980 the level of machinery imports declined by 19 percent. In contrast, Vietnamese machinery imports from the U.S.S.R. increased by more than $150 million to a record $342 million in 1979 and registered only a small decline in 1980.

The EC and Japan were Vietnam's leading suppliers of Western machinery and equipment in 1976–80. Non-electrical machinery accounted for nearly two-thirds of total machinery purchases from the West over the five year period. Major Vietnamese imports under this category included mining and construction equipment, agricultural machinery, and mechanical handling equipment. With regard to imports of Western electrical machinery, which totalled $135 million in 1976–80, electric power equipment was the leading item. Meanwhile, trucks and fishing vessels accounted for the lion's share of Vietnamese purchases of transport equipment.

IV. HARD CURRENCY EXPORT CAPABILITIES, 1981–85

At best, only a small rise in Vietnamese exports to the West in 1981–85 can be expected. Increases in hard currency exports should be severely limited by Hanoi's export commitments to the CMEA countries, a continuation of the West's policy of reduced commercial ties with Vietnam, and production problems stemming from poor management, insufficient imports of raw materials, energy shortfalls, and the diversion of resources to the military. (See Table 4 for a breakdown of Vietnam's trade with 29 hard currency trading partners for 1976–80.) Under the recently signed commodity exchange agreement with the USSR, Vietnam is expected to increase and speed up its regular exports of rubber, coffee, spices, timber, and handicraft products.

The following is an assessment of Vietnam's export capabilities for 1981–85.

Foodstuffs.—Exports of foodstuffs to the West could end their downward slide and begin to rise by the mid-1980s if Hanoi succeeds in its efforts to revitalize the seafood industry; these exports accounted for roughly one-half of hard currency foodstuffs sales in 1976–80. Since 1976, Vietnam has purchased an estimated $84 million worth of fishing vessels from the West—mainly from Norway, France, and the U.K.—and $21 million worth from the USSR. In addition, Hanoi has constructed several new freezing plants and has developed a shrimp farm in the South with assistance from the Asian Development Bank. Barring severe weather, hard currency sales of coffee and tea—Vietnam's second leading foodstuffs export—also are expected to rise because of increased output. Deliveries to Japan and Hong Kong in

TABLE 4.—SRV EXPORTS TO 29 HARD CURRENCY TRADING PARTNERS

[Dollar amounts in millions of U.S. dollars]

	1976	1977	1978	1979	1980	Average annual rate of growth, 1977–80 (percent)
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	$54.9	$49.5	$39.6	$34.5	$34.1	−11
Fish and fish prep	24.5	27.1	24.1	20.2	18.3	
Cereal grains	4.5	1.8	1.3	.6	.4	
Fruits and vegetables	1.1	.5	1.7	2.0	.6	
Refined sugar	3.2	4.3	2.0	1.5	6.6	
Coffee, tea, and spices	14.1	8.2	6.0	7.9	7.8	
Feedstock for animals	3.2	3.2	1.4	1.3	(1)	
Other	4.3	4.4	3.1	1.0	.4	
Fuels and crude materials (SITC 2, 4)	54.1	74.1	56.4	69.8	68.6	6
Crude rubber	14.6	15.1	12.8	17.9	19.2	
Crude animal and vegetables material	5.9	10.7	8.4	8.7	8.1	
Coal	32.4	47.3	32.6	39.7	36.1	
Other	1.2	1.0	2.6	3.5	5.2	
Chemicals (SITC 5)	2.4	1.8	2.3	1.6	.8	−24
Perfumes and cleaning products	2.2	1.5	2.1	1.4	.8	
Other	.2	.3	.2	.2	.7	
Basic manufactures (SITC 6)	3.3	3.9	5.3	4.7	3.8	4
Textiles, yarn and fabrics	1.4	2.3	3.0	2.3	2.3	
Nonferrous metals	.4	.2	1.2	1.3	.1	
Other	1.5	1.4	1.1	1.1	1.4	
Machinery and transport equipment (SITC 7)	.4	.3	.6	3.2	(1)	
Machinery, nonelectrical	.1	.1	(1)	1.9	(1)	
Electrical machinery	.2	.1	.1	.5	(1)	
Transport equipment	.1	.1	.5	.8	(1)	
Miscellaneous manufactured goods (SITC 8)	1.8	3.2	3.9	4.7	6.5	38
Clothing	.2	.7	.9	1.8	3.0	
Basketwork	.9	1.8	2.4	2.2	2.4	
Other	.7	.7	.6	.7	1.1	
Other (SITC 9)	1.0	(1)	2.4	.1	.3	−25
Total	117.0	132.8	108.5	118.5	114.1	−1

[1] Negligible.

Source: U.N. trade tapes, 1976–80.

1976–80 accounted for roughly four-fifths of Vietnam's foodstuffs exports to the West. These countries most likely will remain Vietnam's leading customers for foodstuffs in 1981–85.

Fuels and Crude Materials.—Hard currency sales of coal—Vietnam's leading foreign exchange earner—could recover and rise gradually in 1981–85 if output can be increased substantially in the next several years. In an effort to boost coal production, Hanoi over the past five years has made substantial purchases of mining and processing equipment and has sought Soviet assistance to develop new mines and expand existing facilities. Imports of Western mining and processing equipment for 1976–80—mainly from the EC—totaled roughly $119 million while similar purchases from the USSR amounted to an estimated $102 million. In addition, the Soviets have helped to expand several existing mines including the one at Coa Son where output reportedly was increased by one-half. Moscow also helped to develop the Mong Duong mine, which was completed in late 1980. However, poor maintenance and shortages of spare parts should continue to hamper coal production. Hard currency constraints, meanwhile, are expected to slow the development of new coal mines. In 1976–80, more than four-fifths of Vietnam's coal exports went to Japan with South Korea getting most of the remainder in recent years. Asian demand for Vietnamese coal is expected to remain strong because of production problems facing China's coal industry; the PRC has been a major supplier of coal to the region.

Vietnamese exports of natural rubber to the West are expected to continue rising in 1981–85. After suffering severe disruption during the war, rubber production now appears to be on the road to recovery. Malaysia has assisted Vietnam in its replanting and modernization efforts.

Exports of nonferrous metal ores, which have been insignificant in the past, could become an important source of hard currency in the mid-1980s. Vietnam has begun to develop, with Soviet assistance, its reserves of nonferrous metals such as chromite, manganese, titanium, and bauxite. In 1979, Hanoi began shipping chrome ore to the West.

Oil is not expected to play a role in Vietnam's trade with the West in 1981–85 since no commercial quantities so far have been discovered offshore. Indeed, Western oil companies recently abandoned their search. Hanoi invited Moscow to join the hunt in 1980 and reportedly gave the Soviets access to an area previously worked by U.S. companies. If oil is discovered, it most likely would be earmarked for domestic use with any remainder going to the CMEA countries.

Other Exports.—Chemicals, manufactures, and machinery and transport equipment should continue to be only marginal sources of foreign exchange. Production problems stemming from shortages of raw materials, skilled labor, and energy are expected to be constraining factors. In addition, the USSR should capture a growing share of Vietnam's manufactures exports over the next five years, as Hanoi steps up shipments of these goods in payment for increased Soviet deliveries of essential commodities to Vietnam.

V. HARD CURRENCY TRADE AND DEBT OUTLOOK, 1981–85

Considering the above assessment, Vietnam's hard currency imports from the 29 countries for 1981–85 are projected to decline at an average annual rate of 3 percent with exports increasing at an average annual rate of 6 percent. As a result of these growth rates, imports would fall to a projected $447 million in 1985 and exports would total roughly $150 million. (See Table 5 for 1985 trade projections and corresponding average annual rates of growth for each major trade category.) Vietnam's hard currency trade picture largely depends on the situation in Southeast Asia. If there is some movement toward a peaceful resolution of the Kampuchea problem, then Vietnamese imports could halt their decline and perhaps increase as Western countries renew their commercial and financial ties with Hanoi. On the other hand, imports most likely would decline at a faster pace if Vietnam stepped up its military actions in Southeast Asia.

Based on the projections for imports and exports, Vietnam's hard currency debt at yearend 1985 would be roughly $3.0–$3.5 billion. The projected accumulated trade deficit for 1981–85 totals about $1.5–$2.0 billion. As in the past, Hanoi is expected to rely mainly on long-term concessional loans from foreign governments and, to a lesser extent, on international financial institutions. Vietnam's current debt repayment difficulties, however, presumably will make it harder for Hanoi to obtain additional credits. Vietnam is in arrears on payments to Japanese banks and trade companies and reportedly has requested rescheduling. There are indications that Hanoi has made similar requests to several of its other Western creditors.

VI. U.S.-VIETNAM TRADE POTENTIAL UNDER NORMALIZED CONDITIONS

Because of departmental actions and U.S. statutes, U.S. commercial relations with Vietnam are virtually nonexistent. Using the Trading with the Enemy Act of 1917 (as amended) as the legal basis, Treasury in 1975 blocked all financial and commercial transactions with South Vietnam. As a result, about $80 million in Vietnamese assets were

TABLE 5.—PROJECTED 1985 VIETNAM'S TRADE WITH 29 HARD CURRENCY TRADE PARTNERS

[In millions of U.S. dollars]

	1980	1985	Average annual rate of growth for 1981–85 (percent)
Imports	518	447	−3
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	156	163	2
Fuels and crude material (SITC 2, 3)	34	30	−2
Chemicals (SITC 5)	45	55	4
Basic manufacturers (SITC 6)	75	60	−4
Machinery and transportation equipment (SITC 7)	188	115	−9
Miscellaneous manufacturers goods (SITC 8)	15	20	5
Other (SITC 9)	4	4	(1)
Exports	114	150	6
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	34	41	4
Fuels and crude material (SITC 2, 3)	69	87	5
Chemicals (SITC 5)	1	2	15
Basic manufacturers (SITC 6)	4	4	(1)
Machinery and transportation equipment (SITC 7)	(1)	2	0
Miscellaneous manufactured goods (SITC 8)	6	14	18
Other (SITC 9)	(1)	(1)	(1)
Total turnover	632	597	−1
Trade balance	−404	−297	

[1] Negligible.

frozen and put under U.S. Government control. During the same year, the Commerce Department placed an embargo on U.S. exports to Vietnam; the Export Administration Act of 1969 and the Trading with the Enemy Act, as amended, were the legal justification for Commerce's action. Vietnam was classified as a Group Z country, thus, a validated license is required for the export and reexport of virtually all U.S. origin commodities and technical data to Vietnam. U.S. policy is to deny virtually all applications or requests for shipment of U.S. goods to Group Z countries. Noncommercial exports to meet emergency needs are considered on a case-by-case basis. With minor exceptions, imports of Vietnamese goods also require licenses; U.S. policy is to deny these licenses.

Vietnam is denied U.S. assistance, government-guaranteed credits, and most-favored-nation treatment under U.S. statute. In 1978, Congress passed the Foreign Assistance and Related Programs Appropriations Act, which prohibits the use of federal funds as aid or any other form of payment to the Socialist Republic of Vietnam. (This act has been continued annually by Congress.) Meanwhile, the Trade Act of 1974 prohibits the granting of government-guaranteed credits and MFN treatment to any country that denies its citizens the right or opportunity to emigrate and is not cooperating with the United States in providing a complete accounting of U.S. military and civilian personnel.

Because of the embargo, U.S. exports to Vietnam since 1976 have been minimal. Except for 1981 when U.S. deliveries totalled an estimated $7 million, substantially less than $2 million worth of goods annually have been granted export licenses. (Table 6 contains a breakdown of U.S. exports to Vietnam for 1976–80.) Humanitarian goods or commodities with a humanitarian end-use have accounted for the deliveries.

TABLE 6.—U.S. EXPORTS TO VIETNAM

[Millions of U.S. dollars]

	1976	1977	1978	1979	1980	1981
Total exports	0.63	0.05	1.88	0.54	1.15	10.1
Foodstuffs, animals and vegetable oils and fats (SITC 0, 1, 4)	0	0	1.50	0	0	0.15
Wheat	0	0	1.50	0	0	----------
Fuels and crude materials (SITC 2, 3)	.02	0	0	0	0	(1)
Textile fibers	.02	0	0	0	0	----------
Chemicals (SITC 5)	.31	0	(1)	.14	.45	.27
Chemical elements	.05	0	0	0	0	----------
Dyes and tanning products	(1)	0	0	0	----------	----------
Medical products	.08	0	(1)	.13	.10	.27
Perfume and cleaning products	(1)	0	0	0	0	----------
Fertilizers manufactured	.09	0	0	0	0	----------
Plastic materials	.03	0	0	0	0	----------
Chemicals (n.e.s.)	.05	0	0	.01	.35	----------
Basic manufacturers (SITC 6)	.07	(1)	.12	0	0	(1)
Rubber manufactured (n.e.s.)	.06	0	0	0	0	----------
Paper and paperboard	0	0	.12	0	0	----------
Textiles, yarn and fabric	.01	0	0	0	0	----------
Machinery and transport equipment (SICT 7)	0	.02	.02	.14	.04	.06
Machinery, nonelectric	0	0	(1)	0	.02	----------
Electrical machinery	0	.02	.02	.14	.02	.06
Miscellaneous manufactured goods (SITC 8)	.09	(1)	.02	.15	.37	.92
Furniture	0	0	(1)	0	0	----------
Clothing	.02	0	(1)	.12	0	.06
Instruments, watches and clocks	.06	(1)	.02	.03	(1)	.01
Miscellaneous manufactured (n.e.s.)	.01	(1)	0	0	.36	.35
Other (SITC 9)	.14	.01	.22	.11	.29	8.72

(1) Negligible.

Source: U.N. trade tapes, 1976–80 and Census trade tapes, 1981.

If relations between the United States and Vietnam were normalized (that is, the removal of commercial restrictions and the granting of MFN status), Hanoi most likely would look to the United States for foodstuffs—mainly wheat and wheat flour—and, to a lesser extent, machinery—particularly petroleum, mining, and construction equipment. The level of U.S. capital goods exports would depend largely on the availability of concessionary financing. Hanoi presumably would continue to seek credits that offer longer repayment periods and lower interest rates in efforts to hold down its hard currency outflows. Meanwhile, demand for other U.S. products most likely would be marginal because of Vietnam's growing dependence on other CMEA countries and worsening hard currency shortages.

On the import side, Vietnam over the next four years will have little to sell the U.S. (Table 7 contains a breakdown of U.S. imports from Vietnam for 1976–81.) Production constraints and an increasing commitment to CMEA should severely limit the supply of goods available for export to the West. This is particularly true for commodities traditionally exported to the U.S. by other Asian countries such as textiles and light manufacturers. With regard to Vietnam's leading hard currency exports—coal and fish products—the U.S. does not import coal and Vietnamese fish exports mainly are aimed at neighboring markets. Consequently, U.S. imports from Vietnam for 1982—85 would increase only nominally despite lower import duties stemming from MFN status. In the longer run, however, the potential exists for U.S. imports of Vientnamese nonferrous metals if Vietnam can successfully develop its reserves of titanium, chromite, tin, copper, lead, and bauxite.

VII. PROJECTED 1985 U.S.-VIETNAM TRADE UNDER ALTERNATIVE SCENARIOS

Considering the above assessment, projected U.S. exports to Vietnam in 1985 range from virtually no shipments to $114 million with U.S. imports between zero to $15 million. The low projections reflect a continuation of the U.S. embargo on trade with Vietnam while the high projections assume the normalization of commercial relations in 1982.

In light of the uncertainty surrounding Kampuchea's future and the current low ebb of U.S.-Soviet relations, chances for the U.S. establishing commercial ties with Vietnam in the near-term appear to be extremely poor. A solution to the Kampuchea problem that satisfies the U.S. as well as Vietnam's neighbors—particularly China—presumably would play a key role in any U.S. decision to remove the trade embargo. Other considerations include a satisfactory resolution of the MIA issue and the settlement of outstanding claims against Vietnam. The granting of economic assistance or reparations also could pose a problem if, as in the past, Hanoi demands such payments as a precondition to normalization of relations. The U.S. has opposed such preconditions and probably will continue to do so.

TABLE 7.—U.S. IMPORTS FROM VIETNAM

[Millions of U.S. dollars]

	1976	1977	1978	1979	1980	1981
Total imports	1.12	0.47	0.23	0.78	0.04	0.10
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	0.10	(1)	0	0	0	0
Fish and fish prep	.01	0	0	0	0	----------
Cocoa	.09	0	0	0	0	----------
Miscellaneous food preparations	0	(1)	0	0	----------	----------
Fuels and crude materials (SITC 2, 3)	0.6	0	0	.02	0	0
Wood	0	0	0	.02	0	----------
Crude fertilizer and minerals	.02	0	0	.02	0	----------
Crude animal and vegetable materials	.04	0	0	0	0	----------
Chemicals (SITC 5)	0	0	0	(1)	0	0
Basic manufactures (SITC 6)	.52	(1)	.04	.04	(1)	0
Leather, dressed fur	0	(1)	0	0	0	----------
Wood and cork manufactures	.6	0	.01	(1)	0	----------
Textiles, yarn, and fabrics	.04	0	.03	.03	0	----------
Nonmetal mineral manufactured (n.e.s.)	.04	(1)	(1)	(1)	(1)	----------
Tin	.38	0	0	0		----------
Metal manufactures (n.e.s.)	0	(1)	0	(1)	(1)	----------
Machinery and transport equipment (SITC 7)	.23	.09	.07	.45	0	0
Machinery, nonelectric	(1)	0	(1)	0	0	----------
Electrical machinery	.22	.09	.07	.45	0	----------
Miscellaneous manufactured goods (SITC 8)	.18	.37	.11	.25	(1)	(1)
Travel goods, handbags	0	(1)	0	(1)	0	----------
Clothing	.03	.33	.08	.20	0	----------
Footwear	.04	0	0	0	0	----------
Instruments and photography equipment	.01	(1)	.01	0	0	----------
Miscellaneous (n.e.s.)	.10	.03	.02	0.5	(1)	----------
Other (SITC 9)	.02	0	.01	.01	.02	.10

[1] Negligible.

Source: U.N. trade tapes, 1976–80 and Census trade tapes, 1981.

TABLE 8.—PROJECTED 1985 U.S. TRADE WITH VIETNAM

[Millions of U.S. dollars]

		1985	
	1981	Low	High
U.S. exports	7.05	0	114
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	.20	0	75
Fuels and crude materials (SITC 2, 3)	0	0	(1)
Chemicals (SITC 5)	.35	0	2
Basic manufactures (SITC 6)	(1)	0	5
Machinery and transport equipment (STIC 7)	.05	0	20
Miscellaneous manufactured goods (SITC 8)	1.05	0	2
Other (SITC 9)	5.40	0	(1)
U.S. imports	.12	0	15
Foodstuffs, animal and vegetable oils and fats (SITC 0, 1, 4)	0	0	5
Fuels and crude materials (SITC 2, 3)	0	0	10
Chemicals (SITC 5)	0	0	(1)
Basic manufactures (SITC 6)	0	0	(1)
Machinery and transport equipment (SITC 7)	0	0	(1)
Miscellaneous manufactured goods (SITC 8)	.01	0	(1)
Other (SITC 9)	.11	0	(1)
Total turnover	7.16	0	129.0

[1] Negligible.